Every manager responsible for projects in an organisation is interested in performance. Although many managers have regular, detailed reports, some projects may continuously produce unpleasant and often unpredictable 'surprises'. Why is this?

Common reasons for project surprises are:

- People tend to plan with optimism and assume they can 'catch up' later
- Spend and schedule is not comprehensively linked – making it hard to achieve a reconciled view
- Management reports contain summarised values where positives and negatives can 'cancel out' at the summary level. Strong positives and negatives should both attract management attention
- Management review meetings are often 'make sense of the data' events rather than focused review and decision events
- Forecasting is optimistic and is often based on what has been actually spent versus actual project performance

**PERFORMANCE MANAGEMENT – WHAT IS IT?**

Performance management identifies cost, schedule and actual achievement and compares them to the original plan. By also including the actual cost of the work achieved, simple performance indicators are produced. These can tell you how you have performed to-date, how performance is changing over time, and if performance is poor, can provide information on what it will take to recover.

Performance Management can give you objective measures to capture physical achievement and quantify these in performance or financial terms. Because this 'spend' is actually time-phased, it drives accurate output information to finance teams and management. This information is generated at project, programme and portfolio level; producing information and metrics to enable decisions at all levels of the organisation.

Performance Management produces an objective measure to compare performance at every level, including comparison of different projects and programmes, subcontractors and historical performance. Managers can drill-down into the project to identify poor performance and gauge future performance. Performance Management gives you the tools and early detection mechanisms to identify issues - giving you time to implement effective corrective action, invest, prioritise and manage the future with increased awareness.

For managers, performance management produces the metrics for your dashboard reporting, focuses attention on the key things that need to be managed and produces the most accurate simulations of future performance. As projects and programmes progress, remaining costs are continually evaluated and updated and performance-to-date is used to analyse forecasted costs. Fundamentally, it is about getting the right information, to the right person, to help make the right decision.

Performance management is one of the deliverables from using Earned Value (EV). Whether you are interested in using EV to drive Performance Management information or are required to strictly adhere to EV standards, Deltek has tools to automate the output. With 25 years experience as the leading EV vendor, we can help you build the process and environment that is appropriate for your needs.
RUMOURS AND MYTHS ABOUT EARNED VALUE
While many organisations are aware of EV, some believe that it is only appropriate for large projects and are wary of the potential overheads associated with the set-up and oversight of a full EV Management System (EVMS). Whilst there are many fully-compliant ‘certified’ EV Management Systems supporting work on large defence programmes, there is a far higher number of organisations using EV in other industries and on a myriad of project sizes.

Performance Management is one of the outputs of using EV; however it is important to remember that there is a difference between earned value and earned value management systems criteria.

The Earned Value principle states that as early as 10% to 15% complete, a reliable cost forecast can be determined - or in other words, based on the current level of productivity, the project can be forecasted with a high degree of accuracy. Whilst EV uses a series of metrics and the full standard requires a high level of project management maturity, the basic concept can be used to manage any project.

The full EVM criteria are standards for management control systems and often mandated by government bodies (i.e. US, Australia, Sweden and the UK), or by contract owners to state the minimum system and reporting requirements for all concerned in the programme supply chain. Therefore the strict regime and overhead that can be associated with ‘fully compliant’ EVMS do not apply to the majority of organisations because they are not engaged in contracts requiring full EV compliance.

Any organisation involved in projects can benefit from the value of EV and Performance Management. The most important consideration is for an organisation to use an appropriate EVMS for their needs.

Deltek recognises that many project focused companies choose to adopt EVM best practices as a means to improve project management visibility, predictability and performance and to drive internal efficiencies and accountability. Based on many years of experience, Deltek has created a methodology known as the EV Blueprint. This blueprint takes an organisation through the steps required to move from an EV Foundation through to EV Best Practices.

The Deltek EV Blueprint is a method to introduce appropriate practices for your organisation. It offers advice on how to manage process change at the different management levels and offers knowledge transfer, coaching and consulting support to guide all levels of the organisation.

Recognising that an EVMS is a combination of methodology, process, training and tools, Deltek is also the leading manufacturer of software to automate the capture, analysis and distribution of EV information.
EV & PERFORMANCE MANAGEMENT BENEFITS

EXTERNAL BENEFITS
- Access more contract opportunities by demonstrating competence in delivery
- Adhere to the Earned Value Management (EVM) requirements that are mandatory for some government contracts.
- The US, Australian, Swedish and UK defence industry bodies all specify that contractors must adhere to EV standards and are required to produce regular EVM reports to customer programme managers. No EVMS may mean no contract award.
- Accurate and justifiable estimation of projects for bids.
- Encourage a closer working relationship with the customer

INTERNAL BENEFITS

Executives
- Monitor the true health of your projects and identify problems in time to apply effective corrective action.
- Access schedule data, budgets, actual costs, earned value and forecasts from a single repository
- Analyse trends and use past performance to predict final project costs
- Analyse cash flow, margin / profitability and staffing requirements
- Quick and reliable recalculation of the entire project after change occurs

Programme and Project Managers
- Lend evidence and credibility to forecasts with improved EAC estimation
- Utilise advanced techniques to improve both cost and schedule prediction
- Quickly identify issues and focus on resolution plans
- Focus on issues that require immediate management attention, and provide a view of the elements that require focus in the future

Control Account Managers
- Visibility over all information relevant for your work packages
- Enter explanations of variance, impact, and corrective action into a database used for CPR 5 reporting
- Enter adjustments to forecasts and budget in an easy-to-use spreadsheet view
- Automatically log changes to the baseline and trace changes
- Generate detailed or rollup reports directly to Excel spreadsheets

“Being able to compare budgeted cost of work scheduled, budgeted cost of work performed and actual costs allow the programme analysis team to generate cost/schedule status reports at the programme and enterprise levels.”
– SI International, Inc. – General Dynamics Land Systems

Cost Analysts
- Traceability
- Accurate time-phased project costing
- Correct apportionment of budgets across stakeholders
- Quickly identify items that exceed predefined acceptable variances
- Manage multiple budget change requests, cash-flow, contingency and budgets
- Produce standard EV reports: CPR Format 1-5, CSSR, CFSR and 533 directly from the tool
- Maintain a forecast for customer reports and calculate statistical forecasts based on past performance
- Structure the data for different consumers

“We save a lot of time using the “what-if” scheduling utility to plan ahead for aircraft induction.”
– Avion
CASE STUDIES
Below are examples of feedback that customers have provided about Deltek EVMS

“The achievement of cost/schedule integration and centralised data has brought many advantages for Boeing IDS’s programmes.

With this level of automation and discipline, our analysts can really spend more time analysing the data. More analysis time means greater programme control.”

“BOEING

We are now able to view performance data by business function across all projects; it gives us visibility at a functional level that we’ve never had before.”

“Smart project management is critical to our entire company. Given our volume of concurrent projects, we couldn’t afford to waste a single resource.”

CONCLUSION: UNDERSTAND THE TRUE HEALTH OF YOUR PROJECTS
No methodology or process will make projects profitable overnight. Combining EVMS principles and performance indicators provides you early warning signals that allow you to apply effective corrective action.

Performance Management techniques enable better estimating and simulation to help reduce risk of a project. Measuring the health of a project by comparing a budget to actual costs, without project status or earned value, may misrepresent how well your projects are performing.

Performance Management and EV offers an “apples to apples” methodology for understanding how projects are progressing in relation to the original funding and scope. This early warning system lets you know the true health of your projects. Removing the silos and putting the emphasis on Performance Management helps you avoid problems and increase efficiency and profit. Transform your project management competence into a competitive advantage!

TEN BENEFITS OF EVMS
David Christensen’s The Cost and Benefits of the Earned Value Management Process is a research paper that weighs the cost of implementing earned value versus the benefits. The following is the list of benefits for using an earned value management system:

1. A single management control system providing reliable data

2. The integration of work, schedule, and cost using a Work Breakdown Structure

3. A database of completed projects useful for comparative analysis

4. The cumulative Cost Performance Index as an early warning signal

5. The Schedule Performance Index as an early warning signal

6. The Cost Performance Index as a predictor for the final cost of the project

7. An index-based method to forecast the final cost of the project

8. The To-complete performance index to evaluate the forecasted final cost

9. The periodic (e.g., weekly or monthly) Cost Performance Index as a benchmark

10. The management by exception principle can reduce information overload