



CHARISMATEK Software Metrics Services – Estimation

Successful estimation of project effort, cost and schedule is a key factor in mitigating project risk and ensuring project success.

Effective estimates aid in project planning, budgeting and resourcing and in ensuring that projects are completed successfully. They ensure that all stakeholders begin projects with realistic and achievable expectations and help avoid the lost time, frustration and, ultimately, cost associated with failed budgets and schedules.

CHARISMATEK provides a unique capability to bring together experience, tools and data to meet most estimating needs. With around twenty years of excellence in estimating, CHARISMATEK has demonstrated again and again that objective, quantified approaches to estimating IT resource needs are both reliable and economical.

CHARISMATEK provides a range of software and IT project estimation services which will vary according to specific business need – but all with a common basis of good estimation based on good data.

See below for CHARISMATEK's service descriptions and the benefits they provide.

Cost Model Development

A comprehensive and reliable cost model provides invaluable support for IT business decision-making. CHARISMATEK's Cost Models provides the critical bases and numbers for budget forecasts. They also provides the costing infrastructure that enables "what if" flexibility and adaptability to evolving business requirements.

Because we use templates and tools which build in the experience of thousands of past projects, CHARISMATEK's cost models ensure you address all the activities and costs forecasts associated with an IT project. This includes:

- ▶ Software development;
- ▶ Software, hardware and infrastructure purchase, implementation and support;
- ▶ Project management and quality assurance;
- ▶ User and system documentation;
- ▶ Training.

CHARISMATEK utilises industry benchmark data to ensure that all included forecasts align with real project costs and to ensure that project expectations are realistic.

Cost models are invaluable in feasibility studies, business cases and for early project budget estimates.

IT and Software Delivery Estimation

CHARISMATEK provides estimates of project effort, cost, schedule, productivity and quality for the full range of IT and software development, delivery and integration projects.

CHARISMATEK's estimates address the full range of project activities. This includes all software delivery activities from requirements analysis through to installation, along with all other related activities such as software purchases, data cleansing and loading and hardware, network and infrastructure purchases and implementation.

CHARISMATEK also provides estimates for ongoing software and hardware support.

CHARISMATEK's estimates are presented using standard templates supporting ongoing analysis and enhancement.

CHARISMATEK's estimates are used in business case development, request for tender quotation evaluation, project planning and project benchmarking.

IT and Software Support Estimation

Whether assessing long term support costs of a planned project or for a new implementation, an understanding of the typical costs and support activities for this particular type of application provides the background knowledge and confidence to ensure positive and effective support arrangements.

CHARISMATEK provides independent estimates of the effort, cost, productivity and quality for ongoing IT and software support.

CHARISMATEK's estimates address the full range of support activities. This includes technical production support, minor enhancements and user help-desk support.

CHARISMATEK's estimates are presented using standard templates supporting ongoing analysis and enhancement. We work with your people to ensure data selected reflects comparable situations and work practices.

CHARISMATEK's estimates are used in many circumstances, from assessing the effectiveness of current support providers to determining the likely support requirements for new and enhanced IT infrastructure and software applications.

When you know early, you can plan early.

Implementing Estimation Competency

Good Estimating is neither magic nor a "black art".

Good estimating is based on an understanding and identification of the individual cost elements coupled with knowledge of the factors that impact productivity in that environment.

In other words, we can teach you how to do it and share with you the tools and data you will require. Many large organisations prefer to be largely independent in a core skill, such as estimating. CHARISMATEK works with clients to establish a high level of estimation competency within the client's own organisation.

Estimation competency involves:

- ▶ Establishing and implementing an effective framework and set of processes for IT and software project estimation;
- ▶ Ensuring that the estimation framework is capable of addressing the diversity of projects typically undertaken;
- ▶ Ensuring that effective estimation procedures are firmly in place and are properly and formally integrated into existing processes. Also, ensuring that the estimation procedures are clearly understood by all affected parties;
- ▶ Ensuring that all personnel who are responsible for ongoing software project estimation have a full understanding of the techniques and tools required to perform the estimation tasks and that those personnel are confident in their ability to utilise the techniques and tools for determining estimates; and
- ▶ Ensuring that the estimation framework is implemented in such a manner that allows its effectiveness to be properly and objectively assessed and verified. This involves ensuring that it incorporates appropriate quality assurance procedures and key performance indicators.

Estimation Tools

Most current software implementations will involve a complex interaction of software packages, utilities, configuration, security and software creation or adjustment. Identifying how much of this and the cost of that is, for a large project, a herculean task. Starting from just your own or your groups knowledge and experience is really doing it the hard way.

To put it bluntly – you need the right tool. The knowledge and expertise embodied in these tools provides a head start that you simply cannot afford to give away.

CHARISMATEK supplies and implements and provides training and mentoring for the world's leading IT and software estimation tools. Organisations use these tools to effectively estimate and benchmark the effort, cost and schedule of their own IT and software activities.

The estimates and benchmarks provided by these tools combine extensive knowledge of IT and software processes with knowledge bases generated from thousands of completed projects.

Tool users are able to:

- ▶ Model their own processes, projects and environments to ensure the appropriateness of the estimates generated;
- ▶ Utilise a range of reports, graphs and ongoing analyses for tasks including: communicating estimate information to different stakeholders, drilling-down into estimates and comparing estimates;
- ▶ Calibrate and customise the tools to properly reflect the processes and terminology in use and to address any variations between the organisation's own typical project measures and industry norms reflected by the tools.

CHARISMATEK's experienced consultants provide training and mentoring in the use of these estimation tools.

Function Point Analysis

Function Point Analysis is an internationally used industry standard technique for assessing the size of an existing software application or of the new or enhanced software to be delivered by a project.

The assessed size is expressed in Function Points and is utilised as an input within a wide range of project planning, management and control activities including estimation, benchmarking, scope management and contract management.

CHARISMATEK is a leading supplier of Function Point Analysis services. These include:

- ▶ Function Point Analysis of software applications and projects;
- ▶ Validation and auditing of Function Point Counts and Function Point Analysis programs;
- ▶ Training in the Function Point Analysis techniques:
 - IFPUG CPM 4.3; and
 - NESMA Version 2.2.1;
- ▶ The Function Point WORKBENCH™ software tool.

The Function Point WORKBENCH™ is, by any and all measures, the world's leading Function Point Analysis tool. It provides full support for the IFPUG and NESMA methods and acts as a complete repository of all software sizing information. It also provides an extensive collection of functions and reports to maximise the uses and benefits of Function Point Analysis.

Please refer to home page for detailed information on the Function Point WORKBENCH™.

CHARISMATEK's consultants providing Function Point Analysis services have all been IFPUG Certified Function Point Specialists (CFPS) for over ten years.

Benchmarking – Productivity and Quality

CHARISMATEK provides software benchmarking services and information to enable clients to perform effective process comparison and evaluation.

Benchmarking information is carefully tuned to align with a client's industry, project type, processes and technology and addresses both software productivity and quality.

Clients utilise benchmarks to:

- ▶ Assess the effectiveness of their current software suppliers;
- ▶ Understand their current delivery rates to ensure that future planned software activities deliver within budget and schedule; and
- ▶ Set process improvement goals for internal development and support teams.

Productivity Rate Calculator – Customisation

It has long been a truism of the measurement industry that the best forecast of future productivity is past productivity in that environment. Whilst this is true, it is also true that we are constantly changing technology or processes. So we really need to be able to apply known productivity capabilities but also be able to adjust for changed circumstances.

CHARISMATEK's Productivity Rate Calculators (PRC) are simple-to-use software project forecasting tools that are specifically customised and calibrated to reflect a organisation's individual needs.

PRCs allow estimators and project managers to generate forecasts of software project effort, cost, schedule and productivity quickly, easily and confidently.

To develop a PRC, CHARISMATEK collects standard information about a client's software processes, project types, delivery life cycles and key cost drivers. This information is used to customise the structure and layout of the PRC. CHARISMATEK also collects size, effort and cost data about a client's actual completed projects. This information is used in conjunction with equivalent industry benchmark data to calibrate the PRC.

PRCs can be implemented either locally at a client's site or in the "cloud", in which case enhancements made by CHARISMATEK are immediately available.

Benefits

CHARISMATEK's estimation services provide software developers and clients with a range of substantial benefits, including:

- ▶ Objective and repeatable estimates based upon a standardised process and empirical data, as opposed to relying upon the expert judgment of specific individuals with all its implicit subjectivity;
- ▶ Very early assessment of the likely cost and schedule of proposed software and IT projects;
- ▶ Assessment of the total IT project cost - not just software development or delivery tasks;
- ▶ Improved estimation accuracy and precision;
- ▶ The ability to more effectively plan projects and manage resources;
- ▶ Greater customer satisfaction through fewer projects failing due to unrealistic estimates not achieved;
- ▶ Enhanced risk management;
- ▶ Mechanisms for assessing and validating estimates determined through other approaches or from other sources;
- ▶ Software tool support - Tools appropriate to the task from simple-to-use desktop utilities for quick estimates of day-to-day tasks through to complete estimation frameworks supporting large scale IT projects.
- ▶ Industry benchmark data - through its metric network partners CHARISMATEK has access to the world's foremost and best repositories of industry benchmark data related to software delivery and support.

Further Information and Contact CHARISMATEK

CHARISMATEK Software Metrics provides a wide range of quantitative analysis services focussed on adding value to organisations both delivering and purchasing software related products and services.

For further information on all CHARISMATEK's services, see the CHARISMATEK website at www.charismatek.com or contact CHARISMATEK on + 61 (0)3 9696 1255 or at info@charismatek.com.