Metrics Based
Project
Governance

Presented by: Pam Morris
TOTAL METRICS
Pam.Morris@totalmetrics.com
WWW.totalmetrics.com

ISMA Conference September 2006

"Without objective data you are just another person with an opinion"
“harnessing the capabilities of your metrics team to minimise project risk”
Attributes of “Scope Manager”

Excellent skills in:
- ✓ Business analysis
- ✓ Metrics and Function points
- ✓ Communication
- ✓ Management Reporting

Report to:
- ✓ Project Board / Project Sponsor

Paid by:
- ✓ Project Budget/client/supplier

Independence

“SouthernSCOPE Methodology”
Governance

Corporate Governance
- Board of Directors

IT Governance
- CFO
- CEO
- CIO

Project Governance
- Project Board
- Project Sponsor
- IT Project Director
- Business Project Manager
- Development Project Manager
- Project Team

“Scope Manager”
Project Activities – Metrics Based Governance

Business Case

Feasibility Study

Approval

FPA Size “Estimate”

Effort, Cost and Duration Estimate

Budget allocation

ISBSG Industry Productivity Data

BENEFIT - Independent project estimates based on Industry data from ‘best practice’ experience or reality check on client budget.
Will the software be delivered in time and be worth the Business Value?

- ✔ 300 ~ 500 function points
- ✔ Delivery ~ 7 to 9 months
- ✔ Cost ~ $390k to $580k

Budget Approval

Develop Requirements / RFT
Project Activities – Metrics Based Governance

Requirements Specification

Functional Analysis

Requirements Assessment & Refinement

Requirements Functional Size

Requirements Function & Data Catalogued List + Profiles

Benefits – Independently reviewed, auditable, quantified, traceable list of requirements

©Total Metrics
Baseline List of Individual Requirements
Profile and Quantify Requirements

Core Functions selectively identified and selectively sized = 300fps of total of 450 fps
<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function Points</td>
<td>400</td>
<td>550</td>
</tr>
<tr>
<td>PDR hrs/fp</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Effort hours</td>
<td>5,442</td>
<td>7,197</td>
</tr>
<tr>
<td>Duration months</td>
<td>9.0</td>
<td>11.4</td>
</tr>
<tr>
<td>Cost</td>
<td>$642,108</td>
<td>$849,255</td>
</tr>
<tr>
<td>Cost $/fp</td>
<td>$1,167</td>
<td>$2,123</td>
</tr>
</tbody>
</table>
Project Activities – Metrics Based Governance

Tender Response Evaluation

- %Match against RFT Function & Data Catalogue Lists
- Compare against Initial Effort, Cost and Duration Estimate

Select Supplier

Estimates Reality Check

Suppliers Functional Solution

Suppliers Price Dollars per FP

Suppliers total cost and schedule

Suppliers Solution Mapped to Requirements

Quantify % Match = 205 out of core 300 function points can be delivered without change by the Suppliers Package Solution.
Evaluate Suppliers Responses for Reasonableness

<table>
<thead>
<tr>
<th>Estimates</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration months</td>
<td>9.0</td>
<td>11.4</td>
</tr>
<tr>
<td>Cost $/fp</td>
<td>$1,167</td>
<td>$2,123</td>
</tr>
<tr>
<td>Supplies Bids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier A</td>
<td>$1,892</td>
<td>12</td>
</tr>
<tr>
<td>Supplier B</td>
<td>$1,563</td>
<td>10</td>
</tr>
<tr>
<td>Supplier C</td>
<td>$987</td>
<td>6</td>
</tr>
</tbody>
</table>
Project Activities – Metrics Based Governance

Functional Specification

- Specification Assessment & Refinement
- Quantify FRS match to Requirements RFT
- Estimates Reality Check

Advice on Cost & Change Control Model and Metrics

Build


©Total Metrics
Project Activities – Metrics Based Governance

Functional Changes

Specification Assessment & Refinement

Update Baseline Functional Size

Budget and schedule constraints

Estimates Reality Check

Quantify size of Change for Pricing

Implement Change

BENEFIT – Independent objective assessment of the extent of change and assistance with pricing. Quantify impact on planned schedules and budgets.
Quantified Traceable Changes Against Requirements
Project Activities – Metrics Based Governance

Project Progress Reporting

- Earned Value - FPs delivered versus planned schedule.
- ISBSG Industry Project Activity Profile
- Map User Acceptance Testing Test Cases against Functional Catalogue
- Identify and quantify Test Case coverage, hot spots for defects

Revised Strategy

BENEFIT – Independent assessment of project status by quantifying percent delivered.

© Total Metrics
Project Activities - Metrics Based Governance

Project Implementation

Validation, collation, analysis and submission of Project Metrics.

Project Productivity and Quality Assessment Report

ISBSG Industry Project Data Repository

Contract Signoff

BENEFIT – Independent assessment project productivity and process. Expert to assist in the collation of data for submission to the ISBSG Repository and interpretation of results.
Case Studies

Case 1- Win / Win

- Complete functional requirements
- Successful implementation, on time, on budget and all requirements
- Good Productivity rates
- Ongoing good relationship
Case Studies

Case 2 – Confictive

- ✗ Supplier estimates unrealistic
  - ✔ Early warning of potential over runs

- ✗ Supplier status reporting not reflective true situation
  - ✔ Quantitative assessment of functionality delivered to UAT

- ✗ Requirements not all implemented
  - ✔ Quantitative assessment of functionality omitted for price negotiations
Which Projects Need Governance?

- High risk
- New / inexperienced project management
- High profile
Cost / Benefit Analysis

✓ Cost ? = 1 – 3 % of software cost
  • depending on:
    • level of activities
    • Size of project
    • Internal or external consultant

✗ Cost of not having it ?
  • 0 – >100% of project cost
**Key Success Factors?**

- FSM is a standardised, structured method to identify, classify and quantify functionality to be delivered
- Independence of Scope Manager
- Certification of Scope Manager
- Reporting at Project Board Level
- Commitment both Client and Supplier
- Customisation of method to suit Project
- Transparency of the process
- Availability of relevant ISBSG data
Thank You
Total Metrics

www.totalmetrics.com

+613 9882 7611

admin@totalmetrics.com