“Managing a Mature Measurement Process”

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Welcome

- I am honoured to be invited to present the Ian Drummond memorial lecture.
- I didn’t know Ian, but I suspect he like me was passionate about the power a successful measurement programme can give an organisation.
- I want to share with you lessons learnt following my involvement with an organisation wide measurement programme for several years.

Timeline / Agenda

- Challenges and issues with a measurement programme.
- So now we know where we are – where do we want to get to.
- Measurement Framework – The route
- Conclusions

Challenges and issues with measurement programme

- Are the stake-holders known ?
  - What are they expecting ?
  - What are they funding ?
  - What are acting upon ?
- Are the measurements trusted ?
- Is all the data necessary ?
- Do you know which data is used for which reports ?
- Is the data consistent, accurate enough ?
- ...

“So now we know where we are – where do we want to get to”

- The measurement programme has many less challenges and issues and is providing the business with value, hence making it easy to recognise the contribution of the key players in the measurement programme.
- The management team are getting the information (not just gee whiz data) which enables them to focus on what should have their attention not just on what or who is shouting loudest.

Measurement Framework

- Business needs / policy
- Processes providing data and evidence
- Data collection
- Data repository
- Data analysis
- Reporting

Business needs / policy

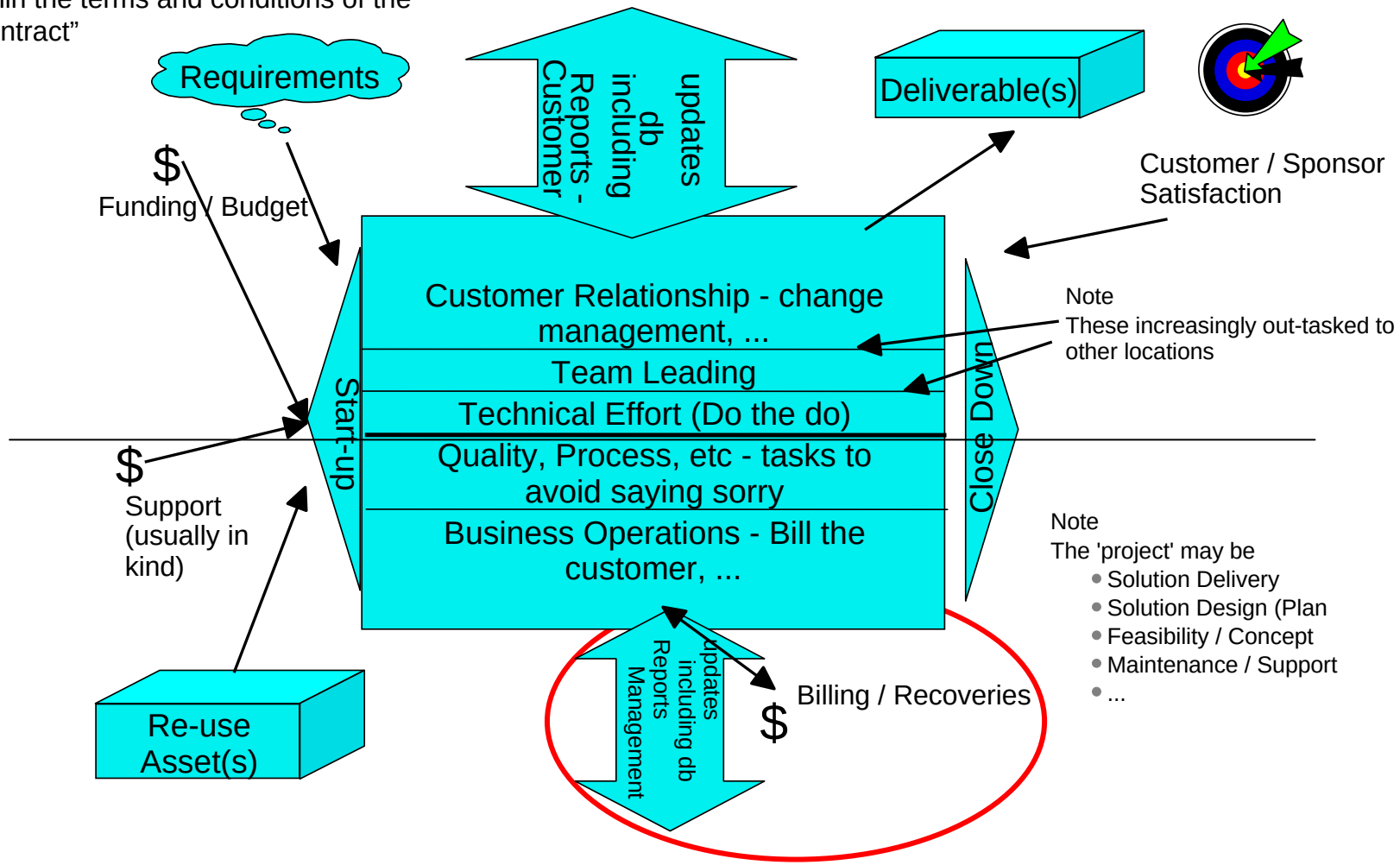
- Work with the Executive / Management team
  - Objectives
    - Level set the business goals that will be measured (testable requirements)
    - Review the map of reports to goals, so everyone can see which are giving least value, hence sunset or at least hide and see who objects so can release effort.
    - Are the reports giving the execs and management what they need to make decisions or provide them with the ammunition they need for their client negotiations?
      If not, what do they want ? What is achievable with the budget they have for the measurement programme ?
  - How achieved
    - Can be done with a facilitated workshop
      - The do's and don'ts of engaging a facilitator

Processes providing data and evidence

- Measurement is not (typically) a revenue earning activity.
  - Get the culture right between do the do and report what's done
    - Business operations is not overhead, its what's necessary to enable you to bill the customer and prove bang for buck. Plus capture information to enable the organisation to do it smarter faster next time without reliance on heroes which all of your competitors can potentially do just as well.
  - Build an effective relationship with the Process Improvement team; ensuring measurement is not seen as the driver
  - Project Managers will never care about project closure activities, which have a key input to measurements, not least because they are looking for their next assignment.

This graphic illustrates the project – see next slide

The goal is to deliver on time, on budget, with required scope and quality of deliverable (s) within the terms and conditions of the "Contract"



Data collection – define, deploy, support

- Data definition is the devil in the detail.
  - Typical challenges and issues are
    - what events correspond to the start and end date
    - what categorisation of projects is required to enable apples to be compared with apples
    - what information in addition to the data (dimensions) is required to allow meaningful roll up and drill down
- Deployment covers
  - Publication
  - Commitment to adopt
  - Education
    - Measurements is the cart – management system, delivery model etc. is the horse.
    - Don't let evolution of the measurement programme be seen to be driver for change in the activities that the Project Managers (PMs) must perform. Ensure that Process Improvement deployment is happening first. As smart professionals it's easy to get ahead of the game.
    - The PM's management should care about measurement because it will enable them to give their PMs a better start and more realistic objectives etc.
      But if the organisation rewards the fire-fighters ...
- Support
  - What's need to prevent "Are these people deliberately trying to sabotage our measurements with their bad data".
  - Audit / data integrity – Building an effective relationship with QA and Business Controls; avoiding garbage in garbage out
    Involve quality reviewers, give them measurement skills get them to assist with identifying weak process / procedures that will give bad data.

Data repository

- Facilitates easier and better quality data collection, analysis, and reporting.
  - Involve a part time techie to enhance automation of reporting and capability of repository – he /she will need some sort of reporting package – don’t penny pinch.
  - A CMMI assessment can be obtained with data on bits of paper on a nail behind the boss’s door.
  - Business value from measurements demands something more sophisticated – however the answer is not always Microsoft Office ;o)

Data analysis

- Quantitative analysis
  - What is the data doing (scatter graphs)
- Statistical analysis
  - “How to lie with statistics”, for example which type of average.
  - One or two values influence the result.
- Hints and tips on getting the best out of the spreadsheets.
  - Work on a copy of the imported data
  - Use the Filter, Sort, & Charting capability
  - Use the data analysis formulae

Reporting

- Taking the “gee whiz” numbers and creating recommendations to management.
  - Involve training/education folks to sharpen quality of reports
- Reports – ensure that in amongst the up out deliverables there is a sensible proportion of down in diagnostic reports available to improve and demonstrate data quality.
- Reports / measures need to be smart to avoid encouraging dumb behaviours
  - For example. The rolling 12 month average trend is a good organisational measure. Setting the average as a target for a particular project is dumb not least because the average of 1,2,8,9 is 5 so a target of 5.5 can’t be done for the 1s and 2s because of their project attributes and is pointless for the 8s and 9s.

How to identify the strengths and weaknesses of your measurement reports

- Categorise reports as
  - Rear view – A report of what has happened. For example rolling 12 month average.
    - A statement of fact but provide management with little opportunity to change the business
  - Dashboard – A report of “current” status. For example project status indicator (RYG)
    - Provide better opportunity to trigger management action – focus on what’s needed rather than “who is shouting loudest”.
  - Windshield – A report of “predicted” measurement.
    - Provide management with a possible future unless they take action.

Conclusions

- The measurement framework addresses the challenges and issues of a measurement programme. Check that for each component its
  - Defined
  - Deployed
  - Supported
- Management of a measurement programme needs input from
  - The executives / managers
  - The Process Improvement team
  - Technical folks to improve the infrastructure
  - Data modelling and analysis subject matter experts
- The goal is to enable executives and management to focus on what needs their attention, not just on who or what is shouting loudest.