



Manoeuvring on the Metrics Maturity Motorway

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Outline



- **Some basics about Metrics**
- **The Problem Managers Dilemma**
- **Capability Maturity Model, COBIT and Metrics**
- **The Metrics Maturity Motorway**
- **Closing Thoughts**

Basic Points



- 1. Bad data is bad data whatever you do to it**
- 2. You can fool yourself into thinking that the figures have improved because of what you've done when it is just a coincidence**
- 3. People interpret figures to suit their agenda**
- 4. Out of context figures mean nothing**
- 5. Don't presume you know what metrics your customer needs**
- 6. Don't presume your customer knows what metrics they need!**
- 7. No one reads boring reports that are the same every month**



The Sunningdale Model

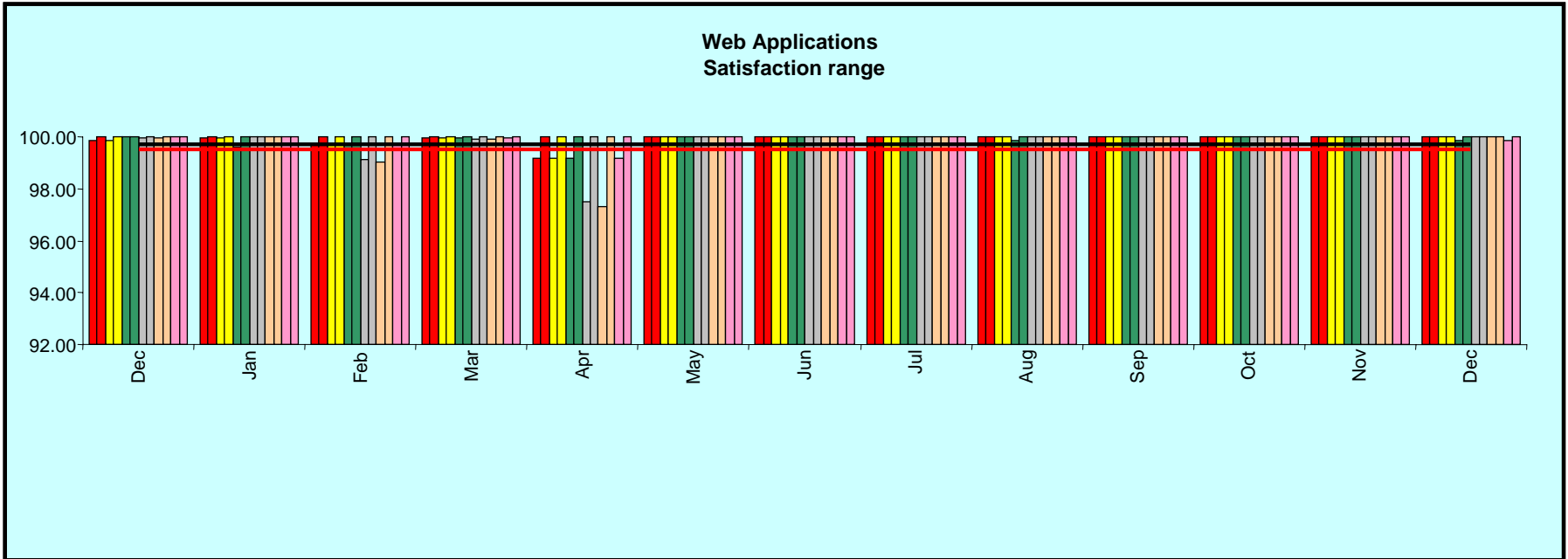


Bad Metrics



- **Too simplistic**
- **Too complex and technical**
- **Based on presumptions**
- **Open to misinterpretation and false extrapolation**
- **Focussed on the past**
- **An unreliable baseline for measuring improvements**
- **An after thought in designing systems, services and processes**
- **Rarely subject to a fundamental review of their usefulness**
- **Wallpaper for a manager's office**

The Wallpaper Graph



Good Metrics

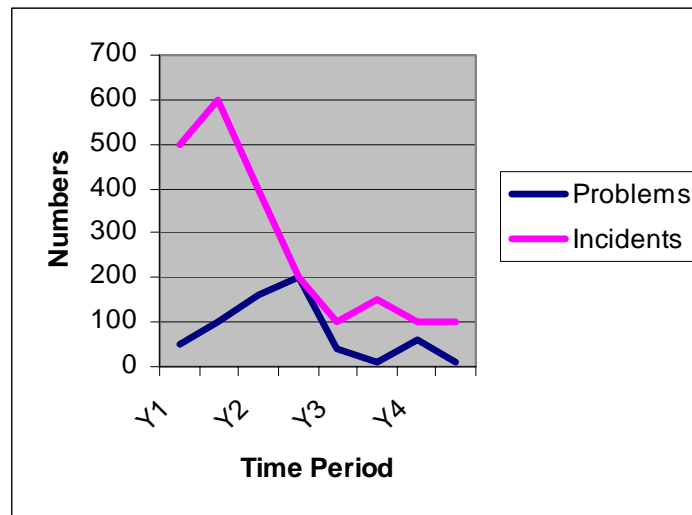


- **Appropriate for an organisation's level of maturity**
- **Properly designed**
- **Limits are understood**
- **Changed in response to business change**
- **Understood within the fullest possible context**
- **Focussed on the future**
- **Used to generate actions**
- **Used to assess results**

The Problem Manager's Dilemma



- How the PM proves their performance is effective has to change over time
 - Increase in problems identified is good at start of PM project
 - Mid term should see a reduction of both incidents and problems
 - Long term problems and incidents should be under statistical control with no significant variation



Formal Approach to Process Maturity – CMMI/COBIT



- **Level 0: Non existent**
- **Level 1: Initial/Ad hoc**
- **Level 2: Repeatable but intuitive**
- **Level 3: Defined Process**
- **Level 4: Managed and measurable**
- **Level 5: Optimised**

COBIT Control Objective A16

Change Management



- **Key Goal Indicators**

‘What has to be achieved’

- No interruptions to business caused by failed changes
 - Business changes implemented at right time
 - Proportion of discretionary changes to mandatory
 - Total cost of managing changes
- **Note these cannot be measured until you’ve reached at least CMM level 3!**

COBIT Control Objective A16

Change Management



- **Key Performance Indicators**

‘How well the process is performing’

- Average age of changes in change queue
- Number of unauthorised changes detected
- Percentage of emergency changes
- Number of changes that have to be nacked out and/or re-worked
- Percentage of changes refused

Metrics at Each Level



- **Level 0: Non existent**
 - Metrics that don't matter or none at all
- **Level 1: Initial/Ad hoc**
 - Metrics cannot provide a trusted baseline
 - Metrics used defensively
- **Level 2: Repeatable but intuitive**
 - Binary metrics (Service is either acceptable or not – any precision is spurious)
 - Initial Baseline can be established
- **Level 3: Defined Process**
 - Tolerances can be established
 - Tendency to have KPI overkill
 - Focus on failure
- **Level 4: Managed and measurable**
 - Statistically valid measurements
 - Reduction in the number of KPIs
 - An increase in their breadth and inter-connectedness
- **Level 5: Optimised**
 - Metrics used adaptively depending on the current need

Before You Start your Journey



- **Pass a driving test**
- **Getting to the destination is what matters**
 - You have to know where that is...and where you are starting from
- **Plan how to get there**
 - Get a good map
 - Have an idea where to stop
- **Know what to expect**
 - Identify the landmarks
 - Listen to forecasts

Or in IT terms...



- **Get some training in statistics and data presentation**
- **Use assessments to identify where you are**
- **ITIL, COBIT, ISO20000 provide the maps**
- **Don't expect to get to Level 5 in one go – you won't!**
- **Know when a breakpoint in the figures means you've made progress**
 - **A major fall in customer satisfaction % can be a good thing early on, because it means you are both raising their expectations and getting an accurate understanding of what they REALLY think about you!**
- **Don't be so arrogant that you don't believe you have anything to learn from other organisations or consultants**

The Navigator



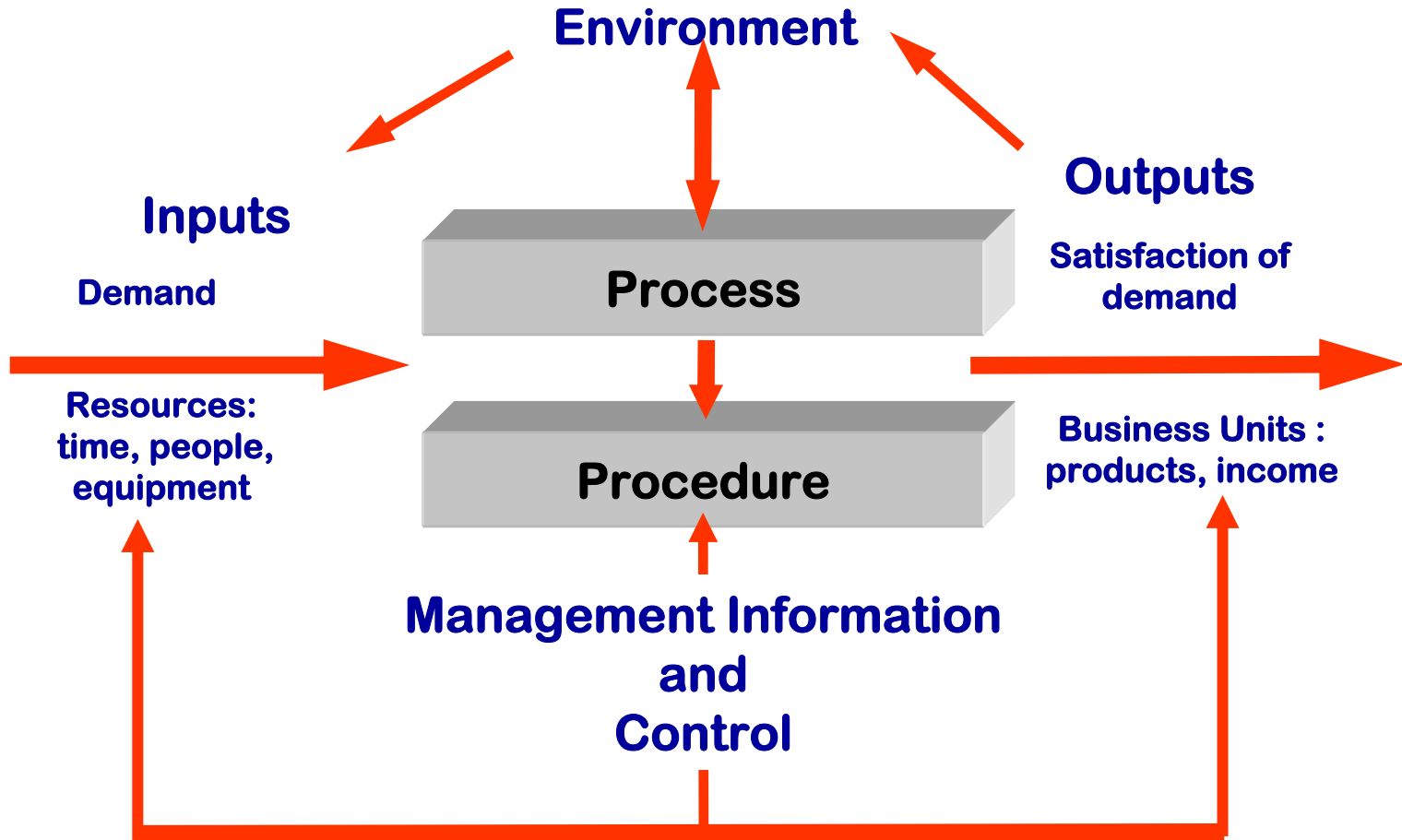
- **The Human Element**
 - Trust and interaction
- **The Right Information**
 - Accurate if it can be
 - If it isn't, say so and explain why!
 - Appropriate for the type of driver
- **The Right Timing**
 - Avoid that 'You should have taken the last exit!' moment
- **Context is everything**
 - You need to know other things to make use of what you are being told

Or in IT terms...



- **Don't just send the reports out – go and present and explain them**
- **If your customers don't trust your figures it means they don't trust you**
- **Different types of manager want different reports, and vary in their ability to understand metrics**
- **There is no point reporting so late that the report is irrelevant**
- **Explain any caveats to the figures**
- **Use narratives to explain what the figures show, and what you are going to do in response to them.**

When and Where to Measure Process



Signs



- **We look for and notice different signs**
 - Depending on where we are and how fast we are going
- **Information, not noise**
 - The designers of signs give us clues
- **Most signs are on the inside lane**
 - Drivers in the outside lane already know where they are going!
 - But you'd better take notice of the ones that aren't!

Or in IT terms...



- **An organisation at a low level of maturity needs different metrics to one that is already mature**
- **Different levels of management need different information**
- **Bad design of metrics, graphs and reports can stop vital messages being spotted in time to take action**
- **There are some metrics that we all need to know – like the number of changes that have to be backed out**

Your Fellow Drivers



- **Different drivers are in their own unique place on the motorway**
- **Different drivers are going to different destinations**
- **You need short and long term knowledge of what they are doing**

Or in IT terms...



- **Different processes and different managers have different objectives, as do your suppliers**
- **You need to adopt the information you give to others involved in Service Delivery to meet their different needs**
- **You can use metrics to keep track of whether or not your suppliers are still aligned with you, both tactically and strategically**

Your Passengers



The Bad Bits

- Are we nearly there yet?
- I need the toilet
- I think I'm going to be sick
- I've been sick

The Good Bits

- An extra pair of eyes
- Someone to talk to

Or in IT terms...



- Stakeholders get bored of the same figures
- They don't have the same perception of the journey that you do
- They have problems of their own
- They don't feel in control of IT
- When they are unhappy it is your problem too

- Don't ignore what they can tell you.
- See the production of metrics as a conversation that benefits you as well as them.

Mirror, Signal, Manoeuvre



- **Mirror**
 - Know what is behind you
 - How big is the vehicle in your mirror?
 - Know your blind-spots
 - Look ahead as well!
- **Signal**
 - Think ahead and allow time for others to notice
 - You are signalling to benefit other road users
 - A good driver will predict what other drivers will do
- **Manoeuvre**
 - He who hesitates is lost
 - Be realistic in what you can achieve

Or in IT terms...



- **Most metrics tell you about the past**
- **Its easy to over emphasise recent history**
- **Don't presume metrics tell you everything**
- **You are trying to control the future, not defend the past**
- **Know what you expect to happen next, but understand there is a risk it won't happen at once, or even at all**
- **A change in the metrics you report on signals a change in management direction**
- **Don't spend one more day producing wallpaper graphs!**

Conclusions



- **Your ability to measure things is related to your process maturity**
 - Don't look for a 'one size fits all' list
- **Early metrics and baselines tend to be optimistic and simplistic**
- **The less mature your processes the more constrained you are in your choice of metrics**
- **The more mature you are the more dynamic and targeted your metrics can become**
- **Don't just change your targets, change what you measure**
- **Metrics should have a clear purpose**
 - Leading to decision making

Help



- **Organisations**
 - ISACA
 - CIMA
 - EFQM/BQF
- **People**
 - Statisticians and auditors
 - Six Sigma Black Belts
- **Books**
 - **Plain Figures** - Myra Chapman
 - **Balanced Scorecard**- Kaplan & Norton
 - **Cost & Effect** – Kaplan & Cooper