

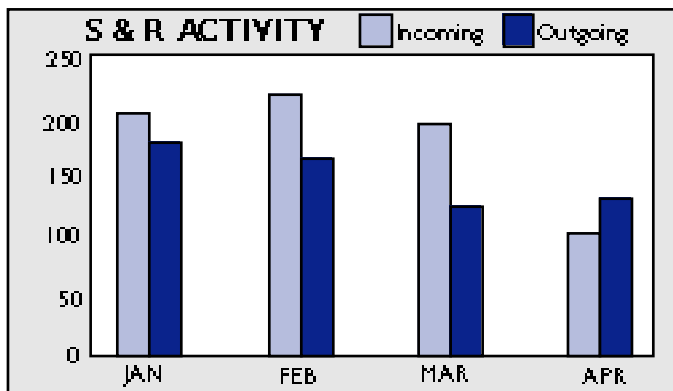
Basic Performance Measurement

BY DAVID P. MAYFIELD, DD, CPPM, LAND OF ENCHANTMENT CHAPTER

Reporting is one of the basic responsibilities of property administration. Some of these reports are mandated (1662s, etc.). Often our management, whether government or contract, requires data for special purposes. This may be for the purpose of monitoring performance or support for a unique decision-making requirement. It may even be self-imposed as a way to document your own work or the work of your group. Whatever the reason for the report, it is important that the information be compiled in a format that is readily usable and understandable. This means putting your data into a language understood by management. As sad as it may seem to those of us who hated mathematics in our academic careers, the language of business is numbers.

Virtually every facet of the property administrator's job contains elements which can be quantified, which can have a measurable numerical value assigned to it. Once these elements have been quantified these values can be used to report total input and output of a function, to track changes over time, or uncover trends in your overall operation. This article will be written from the perspective of the contractor's property manager, but the underlying principles are constant regardless of the environment.

Measurements for any given function actually tend to evolve over time. The first measurement of a function is usually created simply to record inputs and outputs to the system. An example would be the recording of incoming and outgoing shipments in the shipping and receiving department.

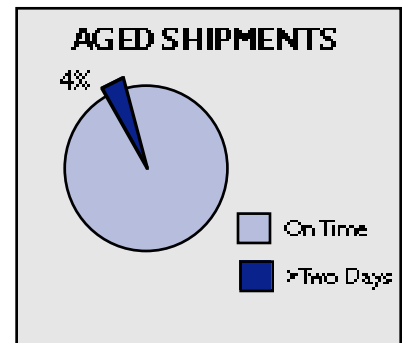


The chart above shows the bar chart resulting from the recording of total incoming and outgoing shipments in a hypothetical shipping and receiving department. This sort of measurement is useful for providing a snapshot of what is being done, but that is about all. Once you have a feeling for what is being done, it is time to determine how the

work is being done. It is important that you select performance criteria that are measurable.

In our imaginary shipping and receiving department there is a concern that shipments are lingering too long on the dock. You examine the processes involved, and set a standard of 2 days processing time for outgoing shipments. You also have your shippers log in and out all items turned over for shipment.

During the following month 130 pieces are submitted for shipment. A review of the log shows that 5 pieces stayed on the dock for more than the standard of 2 days. This information could be presented in any number of ways, but you decide that the clearest way is by showing the aged shipments as part of the whole workload with a pie chart. By laying out your data in two columns (one for on-time shipments and one for late shipments) selecting the proper chart type, your spreadsheet program can automatically produce a pie chart showing appropriate percentages (see chart on right). This gives proper perspective to your data, showing how often things go right as well as how often they don't.



Our examples so far have been fairly simple and have all dealt with the shipping and receiving functions. Functional measurement is limited only by your imagination and your facility with a spreadsheet program. Other examples of functional measurement possibilities related to property management are:

Disposition -

- disposition cycle time
- total disposed property
- percent of total property in disposition/disposed
- percent of book value in disposition/disposed.

Utilization-

- hrs/miles per unit of time
- daily, weekly, etc., as is most useful in your situation

Maintenance-

- downtime per unit of time
- maintenance costs per unit of time

Storage-

total number of items in storage
total dollar value of items in storage

Inventory-

Items found (missing) as percent of total property book
percent missing by area may be a relevant management tool

It is not enough to be able to collect data and present it in an attractive format. You must also be able to interpret that data. To do this adequately, you will have to understand all of the factors that affect the raw numbers that make up your original data. If you notice a dramatic decrease in activity based on your raw data, does it reflect an actual change in activity or has there been a change in information flow? This sort of change can create an artifact, or false impression. If the data is correct and complete, is this a reflection of normal business response? Or a seasonal increase in buying or a "spike" created by the beginning or closing of a new project? This sort of information is worthy of a footnote to your report, especially if it is a report being prepared for people who are not as familiar with your data as you are.

As you prepare to design your measurements, there are a number of questions you must answer. The answers to these questions will determine how you collect your data, what your data sources will be, and to a great degree the format that will be most effective in the presentation of that data.

What will you be measuring?

Will you be measuring what is being done or how it's being done? If you're measuring how well a job is being done, make sure that the standards are quantifiable!

Is the necessary data available from an existing process?

If yes, make sure that you're on distribution for the information. If not, develop a method for collecting the necessary information. The less complicated, the better.

What is the clearest graphic representation of this data?

For small totals or few transactions, raw data may be sufficient. To show relative changes in activity over time, use a bar chart or line chart. To show categories as part of a whole, use a pie chart. Remember, when working with smaller samples, relatively small discrepancies will be amplified by this type of chart. To show the distribution of discrete data points (test scores, etc.) use a scatter graph.

Who will be reading this report?

Make sure that any anomalies are addressed in footnotes, don't expect everyone who sees this data to understand all of the contributing factors.

Once you've done this, remember: The software, the charts, and the graphs are not a substitute for understanding your subject. With software being what it is today, it is quite possible to create an impressive-looking report without understanding the underlying data. This can be an extremely embarrassing situation, and I recommend you avoid it.

This article has been an introduction to fairly elementary measuring and reporting techniques. The best thing that you can do to improve your skills in this area is to become as familiar as possible with your particular software tools, particularly spreadsheet programs. Read the manual. Read third-party manuals. Take a class. Better yet, find a mentor. Then, have at it! ♦

DAVID MAYFIELD is Property Administrator for Raytheon's White Sands Flight Test Facility. He holds a Doctorate of Divinity and is Certified at the CPPM Level. David is a member of the Land of Enchantment chapter.

U.S. Bank Systems

6230 Wilshire Blvd., Suite 65, Los Angeles, Ca 90048
Voice: 818-986-6401 Fax: 818-986-6501
E-mail: sales@usbanksystems.com

We want to buy your surplus equipment

BANKING EQUIPMENT

Kodak, Canon, Minolta, Fujitsu, Atalla, Hedman, Paymaster, Maverick, Standard Register, IBM, Interbold, Diebold, NCR, Unisys, Craden, Eye-com, Addmaster, Pitney Bowes, Verifone, BTI, DSI, Sharp, etc....

TELECOMMUNICATIONS

ATT, Nortel, Northern Telecom, Toshiba, Rolm, Seimens, NEC, Nitel, Panasonic, Comdial, Fujitsu, all voicemail, all channel banks

DATACOMMUNICATIONS

Codex, Motorola, GDC, ATT/Paradyne, Uds, Hayes, Verilink, Kentrox, Adtran, IBM, Micom, Multitech, Penril, Case/Rixon, Microcom, Telebit, Timeplex, Tellabs, Newbridge, Telco, Xyplex, etc...

LOCAL AREA NETWORK

Cisco, IBM, 3Com, Chipcom, Cabletron, Bay networks, Racal interlan, Proteon, SMC, Olicom, Novell, Madge, Network, Acsend, Livingston, Intel, Larse, Wellfleet, Xylogics, Synoptics, Wellfleet, etc..

MULTI-USER COMPUTER SYSTEMS

IBM, DEC, Hewlett Packard, SGI, Sun, Unisys, Data General, Tandem, Stratus, Sequent, Amdahl, Fujitsu, Pyramid, Hitachi, EMC, STK, Xerox

PRINTERS

IBM, HP, SUN, OTC, Dataproducts, Genicom, Fujitsu, Printronix, Seimens, Anzac, Decision Data, Canon, Printek, Kentek, Mannesman Tally, Facit, Lexmark, Pennant, Okidata, Ithaca, Epson, Unisys, Texas Instruments

TERMINALS

IBM, HP, Sun, SGI, Sony, Wyse, Link, Qume, Lynk, 1/0, Decision Data

Please fax your inventory list to 818-986-6501 or call 818-986-6401