



## INTRODUCTION TO FACILITIES MANAGEMENT ANALYTICS

**F**acilities Management, as an industry, has been effective at measuring and improving efficiency and cost-effectiveness. There is near-universal recognition that what is needed next is to improve the strategic positioning of FM by establishing the ability to demonstrate true business impact and communicate it effectively. It is not enough to pursue iterations of cost-cutting, but FM professionals must develop an analytical model that will both link Facilities spending to returns on investment and also guide strategic decision making about Facilities spending—a process we call “FM Value Analytics.”

### Position and Commitment

The companies who pioneer measurement of FM Value Analytics will have a tremendous strategic advantage, as well as a foundation for step-change in effectiveness. Strategic Measures is committed to guiding pioneer companies through this paradigm shift into the era of measurement of business impact. Buoyed by early successes and the overwhelming belief of FM professionals (86.5% of Facility Managers nationwide believe that it is now possible to measure the financial impact of FM activities, according to a straw poll conducted through the magazine, *Building Operating Management*), we have set this as our stake in the ground, and will dedicate ourselves to the success of our Facilities Management partners. Our services bring together expertise from the diverse fields of Statistics, Programming, Strategic Planning, Human Performance Improvement, and Personal and Organizational Transformation - we combine the bottom line focus with the people sensibilities that are needed to align an organization to effective strategies, execute, measure the results, and communicate them effectively.

*Along with efficient workplaces, companies are learning the value of building design that encourages innovation.*

Tom Peters

In a corporate climate where cost savings is king, management enforces strict cost containment as a necessary process for maximizing profits and downsizing the organization to match the economic pressures. The danger is sustaining this cost containment orientation as the status quo and not encouraging a business value orientation that more realistically reflects business impact on the bottom line. Oftentimes the annual percentage line item cuts from management are arbitrarily made across the board—regardless of the prohibitive impact such cuts will have on productivity, risk avoidance, safety, and quality. Moreover, once departments show they can absorb the hit to the budget, they tend to educate management that it can be done again and again, until some managers find themselves coming in at 4:00 am to fill in the gaps they have created in headcount!

Facilities managers understand their direct financial impact to the company's bottom line and believe it's necessary to report it to management but they do not have the methodology or tools to calculate business benefits. By creating a “value orientation” of their contribution to

the bottom line and measuring their business impact with an analytics approach, facilities management and other cost centers can strike a more logical balance between cost savings and business impact. Chapel Hill-based Strategic Measures, Inc. delivers an analytics-based methodology of measurement to calculate financial outcomes for facilities management functions, processes, roles, and projects. Adherence to this methodology, known as “value analytics”, more effectively reports on return on investment (ROI), impact on strategic goals of the company, and optimization of resources.

Value analytics is a methodology for measuring business impact using the principles of “intervention groups” and “control groups” in statistical analysis to isolate the benefit from other possible inputs to the benefit, information which interviews, surveys, and line item budgets will not reveal. In contrast the cost orientation, the value analytics approach relies on greater connectivity and communication between interacting departments—a systems view—demonstrating alignment with the strategic goals of the organization. In addition, departments may experience increased creative breakthroughs as they consider strategic outcomes and gain a better understanding of the business drivers for internal clients. Measurement of ROI is usually considered a historical look on the benefits of a current project. Using an analytics approach, through careful identification of intervention and control groups, departments can tease out additional information to optimize their strategies and deploy the projects across the enterprise for even greater return. Long considered too expensive, complicated, or impossible, measuring business benefit is not only possible, but it is fast becoming a business imperative.

## Measuring the Outcomes

Strategic Measures, Inc. designed a methodology and approach to measure outcomes for specific initiatives, functions, or programs. The output will allow the organizations to utilize this methodology and approach for future projects to determine return on investment (ROI), impact on strategic goals and optimization of resources. The following are performance criteria for success:

- organizations has a documented process flow and defined steps to measure performance outcomes for future projects and initiatives
- The deliverables for this project meet stated objectives and requirements
- Project team members are provided training in the approach and methodology

An analytics approach answers these critical questions:

1. What was the return on investment?
2. What difference did it make on the agency’s strategic goals?
3. What worked best and for whom?
4. What is the best deployment strategy for the project being measured?
5. What could the potential benefit be for future years? For other regions?

The outcomes reflected in an analytics report subsequently are reported graphically, comparing the results of the intervention group and the control group; an ROI report that includes the ROI of the project, the Cost/Benefit ratio, and payback (break even) period); and a recommendations list based on the findings to describe the optimal deployment strategy of the

*Sustainable (building) design is really the future. More and more people are making the connection between energy efficiency, productivity, and profitability.*

Peters

Tom

project. The key to a successful evaluation of a project is to distinguish between an evaluation based on assumptions and that based on statistical analysis. While interviews and customer satisfaction sheets are useful as reflections of attitudes of constituents or clients, these outcomes do not indicate the impact of the project on the organization as a whole. Neither do assessments of knowledge change (testing) and behavior change (skill development). The only valid indicator of a successful project is through an analysis utilizing the principles of intervention and control. The differences between the “Assumptions-based” assessment and “Analytics-based assessment are illustrated below:

<b>Assumptions-based</b>	<b>Analytics-based</b>
Assumptions	Statistics
Opinion outcomes	Financial outcomes
Tactical	Strategic
Cost Savings	Return on Investment
Short-term strategy	Long-term strategy
Maintain status quo	Continuous growth
Budget analysis	Business impact
Spray and pray	Optimizing deployment

An analytics approach requires three basic variables:

### 1. PARTICIPANTS

Who was affected by the project? Criteria for selection of project to measure:

- a. Representative target group of the project
- b. Shares similar tasks and actions expected from the project
- c. Descriptions help to determine subtle differences of impact from the project.

### 2. PROJECT

Description and dates the project was implemented. Criteria for selection of project to measure:

- a. Alignment to agency’s strategic goals
- b. Large budget for which certainty of outcomes required.
- c. High profile
- d. Well-defined intervention and control groups
- e. Data accessible
- f. Representative for other similar projects and participants
- g. New project that needs proving vs. ongoing programs

### 3. METRICS

What performance metrics reflect the desired outcome of the project? Criteria for selection of project to measure:

- a. Data available for all participants in the intervention and control groups
- b. Output of data in spreadsheet form by time increments and participants
- c. Data represents outcome metrics that represent the goals of the project
- d. If possible, assign dollar-ized value to the outcome metrics.

*As tougher economic times hit, maximizing building productivity is more critical than ever in ensuring the success of your facilities and its occupants. The trick to improving productivity is to focus on the occupants, the building, and the systems that keep it running.*

- e. Sample metrics could include the following:
  - 1) Facility: Overall performance of a facility, Operational savings, Total cost of occupancy, Flexibility of the use of the building, Building value: (ie: the potential for sale, sublease, out-lease, or lease termination)
  - 2) Systems: Efficiency of the structure, Energy, Refrigeration, Lighting, Heating/AC, Manufacturing equipment, Ventilation
  - 3) Occupants: Employee productivity, End-users' satisfaction, Distraction-free work, End-users' morale, Error rates, Supports their needs, Absentee rates, Fewer complaints, Tenant retention, Reduced sick building syndrome, Perception of safety, Reduced workplace injuries, Innovation, Lowering health insurance costs, Easy access for learning and collaborating.

## Strategic Measures Services

Strategic Measures is committed to supporting leaders to become better decision makers through better measurement of business outcomes through the following activities:

### Training and Coaching for client companies

The initial engagement for many groups is our day-long seminar "Delivering FM Value Analytics," which develops some of the necessary attitudes, provides FM Value Analytics tools, teaches the basics of FM Value Analytics communication and language, and helps people identify next steps in their particular organization. Follow up modules and one on one or team coaching are available for the deepening all of these attitudes, skills.

### Measurement Projects for client companies

We can help design interventions up front with measurement of impact as a final result, or in some cases we can help examine or assemble data that has already been collected to create Business Impact measures. Sometimes this takes strengthening relationships with other departments/stakeholders that hold the data. With techniques like meta-analysis, it may even be possible to demonstrate our partners' business impact on its client companies as a whole.

### Ongoing Monitoring and Evaluation

Strategic Measures helps organizations develop a system of ongoing monitoring and evaluation to realize increasing returns and creative breakthroughs. Through a system of data collection and modeling of projects, organizations gain a better understanding of the business drivers for their department or team.

## Next Steps

### Stakeholder Meeting

Key objective would be to test overall fit of the philosophy, strategy and objectives of the two companies and to explore viability of the various options.

### Creation of Pilot Engagements

Options here include piloting the Delivering FM Value Analytics training with partner employees (perhaps Sales), or within a client group, with some impact measurement identified ahead of time. A small-scale Measurement Project could also be a useful pilot.