Producing Astonishing Organizational Results

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Goals

1. Tell you how to apply OBM techniques in 5 steps.
2. Give you some examples of how it has been applied in the past.
An organization truly succeeds only when its members achieve results, execution, and discretionary effort.
Results/Execution/Discretionary Effort
Behavior is the key to getting great execution, discretionary effort, and lasting results.
Results/Execution/Discretionary Effort

Behavior
**Applied Behavior Analysis (ABA)**

is the key to understanding behavior.
Results/Execution/Discretionary Effort

Behavior

Applied Behavior Analysis (ABA)
OBM (Organizational Behavior Management) is the science of applying ABA in organizations.

It’s been around for 30 years or more. There are LOTS of data to show that it works.
Scientific thinking enables consistent organizational improvements and organizational learning.
Results/Execution/Discretionary Effort

Behavior

Applied Behavior Analysis (ABA)

Organizational Behavior Management (OBM)

Science

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Why is scientific thinking so important?
Common Myths

We use 10% of our brain.
  - FALSE. We use all of our brain.

Black areas are those not “in use”.

My brain is 10% as large as your brain!

John Austin - BSN 2006 - Keynote Address
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Common Myths

The Atkins Diet works because...
- It changes your metabolism from carbohydrate-burning to fat-burning.
- FALSE.
- It reduces the number of calories you eat. You lose weight.
More Myths…

- No Nobel Prize is awarded for mathematics because Alfred Nobel's wife had an affair with a mathematician.
- A special compound added to the water in swimming pools will reveal the presence of urine.
- Pouring salt water into their coin slots will induce vending machines to dispense free product.
- Eelskin wallets demagnetize credit cards due to leftover charges from the electric eels used to make them.
- Tapping the side of a soda can will prevent its contents from foaming over when you open it.
- The average person swallows eight spiders per year.
- The Great Wall of China is the only man-made object visible from the moon.
- The number of people alive today is greater than the number of people who have ever died.
- Men think about sex every seven seconds.
Why Scientific Thinking?

Scientific thinking causes us to question, learn, and continuously improve.
What’s So Astonishing About This?

1. OBM (a scientific approach to management) produces \textit{dramatic} effects.
   - Some think that 10\% is big jump.
   - Using OBM and BBS, it is not unusual to see 2-fold increases.
   - Sometimes we see 8 to 10-fold increases.
   - This means enormous changes in \textit{the way we do things} at work.
2. It changes the way people see work.
   - Encountering a problem and solving it - changes our role at work
   - Talk to someone who has succeeded in using these concepts - do you see or hear anything different?

This is what led Dick Malott to coin the phrase, “Saving the world with behavior analysis”
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2. Give you some examples of how it has been applied in the past.
GOAL #1
How to “Do” OBM

1. PINPOINT
   • Identify pinpoints
2. MEASURE
   • Develop a measurement system
3. DIAGNOSE
   • Diagnose the problem
4. INTERVENE
   • Develop, communicate, and implement a solution
5. EVALUATE & IMPROVE
Does this look familiar?

Six Sigma Process

- Define
- Measure
- Analyze
- Intervene
- Control

The OBM Process

- Pinpoint
- Measure
- Diagnose
- Intervene
- Improve
Some OBM Studies

- Studies demonstrating OBM:
  - Improving telephone courtesy of healthcare workers
  - Improving sales
  - A lottery system to improve human services employee performance
  - Increasing anesthesia nurse compliance with universal precautions
  - Improving data entry skills and billing for construction foremen
  - Improving office ergonomics
  - Increasing customer service of staff at a large dept store
  - Improving safety training for agricultural workers
(More) OBM Studies

- Improving safety of truck drivers
- Improving safety of bus drivers
- Reducing turnover of human services staff
- 10-15 studies on effects of incentives on work behavior
- Decreasing retail cash register shortages
- Reducing rejects and waste in a manufacturing setting using feedback and goal setting
- Increasing safety belt use and safe driving among delivery drivers
(More) OBM Studies

- Improving therapist performance in psychiatric homes
- Self management training for employees’ self-improvement
- Improving doctor performance suing feedback
- Reducing medical errors using OBM
- Improving courtesy among police staff
- Quality control in a large shipping organization
- Training software use
(More) OBM Studies

- Reducing absenteeism
- Improving time management
- Improving meeting effectiveness and follow-up
- Improving safety in every imaginable industry
  - that’s right, we’re talking about the same basic principles as used in BBS.
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GOAL #2
Present Examples of OBM Applications

In 3 areas:
- Productivity
- Quality
- Safety

These three ARE compatible.
They are products of behavior.
They are subject to the laws of behavior analysis.

Most examples come from Journal of Organizational Behavior Management.
Kempen & Hall, 1977
-7500 workers
-2 plants
-5 years of data
-solution: “Absenteeism management system”
-R+ for attendance
-progressive discipline for absenteeism
FIGURE 1. Average weekly set-up time for each machine during all weeks of the study. Machine 1 was being repaired during weeks 43 and 44, hence no data are reported.

- Video Feedback & Timers
- 50 weeks!
Wikoff, Anderson, & Crowell, 1983
Efficiency increase equal to 800 labor/hrs/wk (20 FTE)
160 employee plant

Feedback plus Praise

100+ weeks

FIGURE 3. Mean weekly efficiency for the Fiberglass department.
Chandler, 1977
Textile manager performance

Positive by-product of productivity focus!

Figure 1. (1) The number of loads dyed before and after the initiation of daily measurement and feedback. (2) The number of negative comments made before and after the initiation of unpublished (excepting occasion C) measurement and irregular, informal reminders. A(i) indicates when the productivity measurement graph was revealed and the review procedure explained. A(ii) indicates when the supervisor was informed that his negative comments were being counted. B indicates when reinforcement was begun. C indicates the occasion when the supervisor was shown a graph comparing the number of loads dyed to the number of his negative comments.
GOAL #1
How to “Do” OBM

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   • Develop, communicate, and implement a solution
5. EVALUATE & IMPROVE
QUALITY IMPROVEMENT

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Feedback

McCarthy, 1978
Textiles spinning department

From 60 down to nearly zero!
Runnion, Watson, & McWhorter, 1978
-59% reduction in fuel purchases.
-Tangible R+, graphs, letters home, Social R+

Figure 3. The miles per gallon data for the long-line fleet drivers for the two years of Study 2. Miles per gallon averaged 4.80 during the one-week baseline and rose to 4.90 during the first year. During the first eight weeks of the second year, miles per gallon averaged 5.01. This dropped to 4.93 during Reversal. For the remainder of the second year, miles per gallon averaged 5.31. The mean for all of the second year was 5.23.
Figure 2. The percentage of each task performed correctly by Subjects 3 and 4 during each condition. WI = written instruction; FI = fixed-interval feedback; CRF = continuous feedback. Breaks in the timeline indicate employee absences (due to holidays, vacations, etc.).
Figure 1. The percentage of each task performed correctly by Subjects 1 and 2 during each condition. WI = written instruction; FI = fixed-interval feedback; CRF = continuous feedback. Breaks in the timeline indicate employee absences (due to holidays, vacations, etc.).
Jessup & Stahelski, 1999
Reduced rejects from 150 to ~30
Goalsetting & R+
Kortick & O’Brien, 1996

From 2200 to 3000+
Feedback and R+

Figure 4. Facility wide mean number of packages sorted correctly for every missorted package baseline through reversal (company standard = 3000).
Godat & Brigham, 1999
Teaching self-management strategies:
- Assertiveness
- Question asking
- Positive comments
- Decreasing socializing
- Decreasing negative responses
- Increasing phone calls returned
- Increasing exercise
- Decreasing fat intake
- Decreasing snacking

<table>
<thead>
<tr>
<th>Titles of the Self-Management Projects</th>
<th>Behavior Measured</th>
<th>Results: Means</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Skill Issues:</strong></td>
<td></td>
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<tr>
<td>Increasing Assertiveness</td>
<td>Initiating discussions with boss</td>
<td>Baseline: .47 responses/day</td>
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<td></td>
<td>Speaking up to boss and coworkers about excessive assignments</td>
<td>Baseline: .80 responses/day</td>
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<td>Speaking up with coworkers when confronted and in social gatherings</td>
<td>Baseline: 1.4 responses/day</td>
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<tr>
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<td>Saying &quot;no&quot; excessive requests</td>
<td>Baseline: .67 responses/day</td>
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<td></td>
<td>Speaking up when confronted</td>
<td>Baseline: 0 responses/day</td>
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<td></td>
<td>Avoidance responses to work assignment requests</td>
<td>Baseline: 1.17 responses/day</td>
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<td>Questions asked of conversant in social situations</td>
<td>Baseline: .6 questions/day</td>
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<td>Questions asked to clarify work assignments</td>
<td>Baseline: 4.2 questions/day</td>
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<td>Paraphrasing when work assignment ambiguous</td>
<td>Baseline: 3.6 paraphrases/day</td>
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<td></td>
<td>Pleasant greetings and responses to staff</td>
<td>Baseline: 1.33 comments/day</td>
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<td>Compliments and thanks delivered to coworkers</td>
<td>Baseline: 0 comments/day</td>
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<tr>
<td></td>
<td>Compliments delivered to staff</td>
<td>Baseline: 1.78 comments/day</td>
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<td></td>
<td>Complementing problem employee for good work</td>
<td>Baseline: 2.8 comments/day</td>
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<tr>
<td>Decreasing Socializing</td>
<td>Time spent socializing on non-work issues</td>
<td>Baseline: 19.54 min/day</td>
</tr>
<tr>
<td>Decreasing Personal Phone Calls</td>
<td>Time spent on personal phone calls</td>
<td>Baseline: 18.89 min/day</td>
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<tr>
<td>Decreasing Negative Responses to Work Issues</td>
<td>Negative responses to work situations</td>
<td>Baseline: 1.33 responses/day</td>
</tr>
<tr>
<td>Decreasing Negative Responses to Coworkers</td>
<td>Ignoring/walking away from complaining coworkers</td>
<td>Baseline: 1.4 responses/day</td>
</tr>
<tr>
<td>Titles of the Self-Management Projects</td>
<td>Behavior Measured</td>
<td>Results: Means</td>
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<tr>
<td>Scheduling/Organizing Issues:</td>
<td></td>
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<tr>
<td>Increasing Filing</td>
<td>Time spent reorganizing files</td>
<td>Baseline: 0 min/day</td>
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<td></td>
<td></td>
<td>Intervention: 22.44 min/day</td>
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<tr>
<td>Increasing Filing</td>
<td>Time spent filing</td>
<td>Baseline: 10.33 min/day</td>
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<td></td>
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<td>Intervention: 25 min/day</td>
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<tr>
<td>Increasing Computer Time</td>
<td>Time on computer learning programs</td>
<td>Baseline: 4.29 min/day</td>
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<td>Intervention: 23.18 min/day</td>
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<tr>
<td>Increasing Computer Time</td>
<td>Time practicing computer skills</td>
<td>Baseline: 0 min/day</td>
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<td>Intervention: 12.27 min/day</td>
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<tr>
<td>Increasing Use of Daily Organizer</td>
<td>Entries and prioritization of work in organizer</td>
<td>Baseline: .7 entries/day</td>
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<td></td>
<td></td>
<td>Intervention: 2.5 entries/day</td>
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<tr>
<td>Increasing Use of Daily Organizer</td>
<td>Entries in organizer</td>
<td>Baseline: .6 entries/day</td>
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<td></td>
<td></td>
<td>Intervention: 4.86 entries/day</td>
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<tr>
<td>Increasing Completion of Unfinished Work</td>
<td>Time spent on work backlog</td>
<td>Baseline: 0 min/day</td>
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<td></td>
<td>Intervention: 46 min/day</td>
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<tr>
<td>Increasing Writing</td>
<td>Time spent writing department procedures</td>
<td>Baseline: 45 min/day</td>
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<td>Intervention: 162.5 min/day</td>
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<tr>
<td>Increasing Phone Calls Returned</td>
<td>Percentage of phone calls returned</td>
<td>Baseline: 45% returned/day</td>
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<td></td>
<td></td>
<td>Intervention: 87% returned/day</td>
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<tr>
<td>Health/Self-Improvement Issues:</td>
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<tr>
<td>Increasing Exercise</td>
<td>Time spent exercising</td>
<td>Baseline: 17.14 min/day</td>
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<td>Intervention: 17.22 min/day</td>
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<tr>
<td>Increasing Exercise</td>
<td>Time spent exercising</td>
<td>Baseline: 0 min/day</td>
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<td></td>
<td></td>
<td>Intervention: 6.65 min/day</td>
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<tr>
<td>Increasing Water Consumption</td>
<td>Cups of water consumed</td>
<td>Baseline: .54 cups/day</td>
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<tr>
<td></td>
<td></td>
<td>Intervention: 2.83 cups/day</td>
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<tr>
<td>Increasing Recording for Medical Problems</td>
<td>Recording food, medication, time in notebook</td>
<td>Baseline: 1 recording/day</td>
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<td></td>
<td></td>
<td>Intervention: 3.08 recordings/day</td>
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<tr>
<td>Increasing the Completion of Domestic Chores</td>
<td>Tasks completed</td>
<td>Baseline: 2.8 tasks/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intervention: 7.25 tasks/day</td>
</tr>
<tr>
<td>Decreasing Snacking</td>
<td>Snacks eaten</td>
<td>Baseline: 1.13 snacks/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intervention: .25 snacks/day</td>
</tr>
<tr>
<td>Decreasing Fat Gram Consumption</td>
<td>Fat grams consumed</td>
<td>Baseline: 65.89 grams/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intervention: 41.82 grams/day</td>
</tr>
</tbody>
</table>
Eikenhout & Austin, 2004
-Customer service
-200+ employees retail store
-Feedback
-Feedback, Goals, R+ from managers
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SAFETY IMPROVEMENT
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Komaki, Barwick, & Scott, 1978

Clarify behaviors,
Graphic feedback,
Manager Praise
Figure 1. The yearly number of days lost from work, per million person hours worked, because of work-related injuries.
Figure 2. The yearly number of work-related injuries, per million person hours worked, requiring 1 or more days lost from work.
Figure 3. The yearly costs, adjusted for hours worked and inflation, resulting from accidents and injuries.

15 years of data!
Ludwig & Geller, 2000
- Driver safety (seatbelts)
- Promise cards
Hickman & Geller, 2005

Self-monitoring to reduce speeding
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What’s So Astonishing?

1. OBM produces *astonishingly large* effects.
2. OBM changes the way people *approach work* and the way they *feel about work*. 
Upcoming Conferences

- **FABA/OBM NETWORK** (all OBM, single track)
  - January 17-18th, Sarasota
  - [www.fabaworld.org](http://www.fabaworld.org)

- **ABA International**
  - May, 2007, San Diego
  - [www.abainternational.org](http://www.abainternational.org)
Recommended Reading

- [www.obmnetwork.com](http://www.obmnetwork.com)
  - Get *Journal of Organizational Behavior Management and OBM Network News* as member benefits by joining the OBM Network

- [www.behavior.org](http://www.behavior.org) - Cambridge Center for Behavioral Studies

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