



The Solutions Network

Rochester, New York

DISPEL THE MYTH
“MAINTENANCE
IS JUST
AN EXPENSE”

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TODAY'S TREND

DO
MORE
WITH
LESS

SOUND FAMILIAR ?



“You have done so much with so little for so long that I’d like you to move on to doing everything with nothing.”

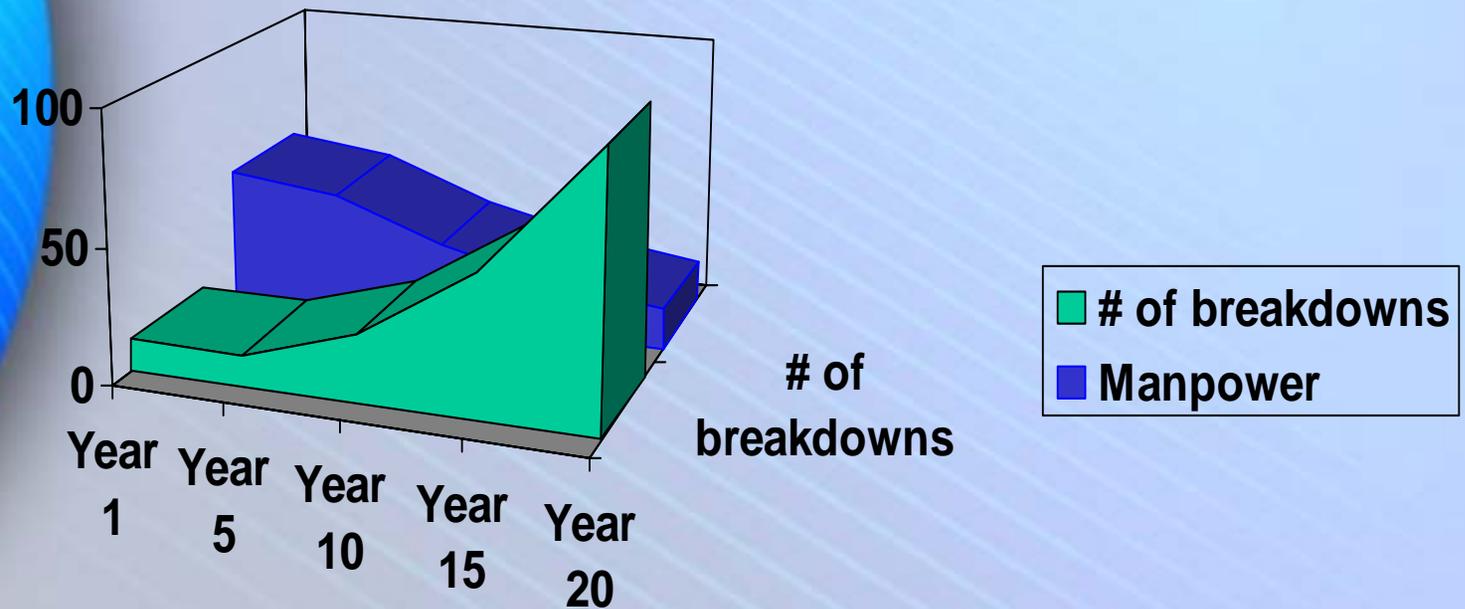


COMPLICATING FACTORS

- ❖ More Assets
- ❖ Aging Assets
- ❖ Rising Costs
- ❖ Lack of Qualified People
- ❖ Fewer People
- ❖ Stricter Regulations
- ❖ Higher Standards on Plant Reliability
- ❖ World Competitive Pressures
- ❖ Etc., etc., etc!!

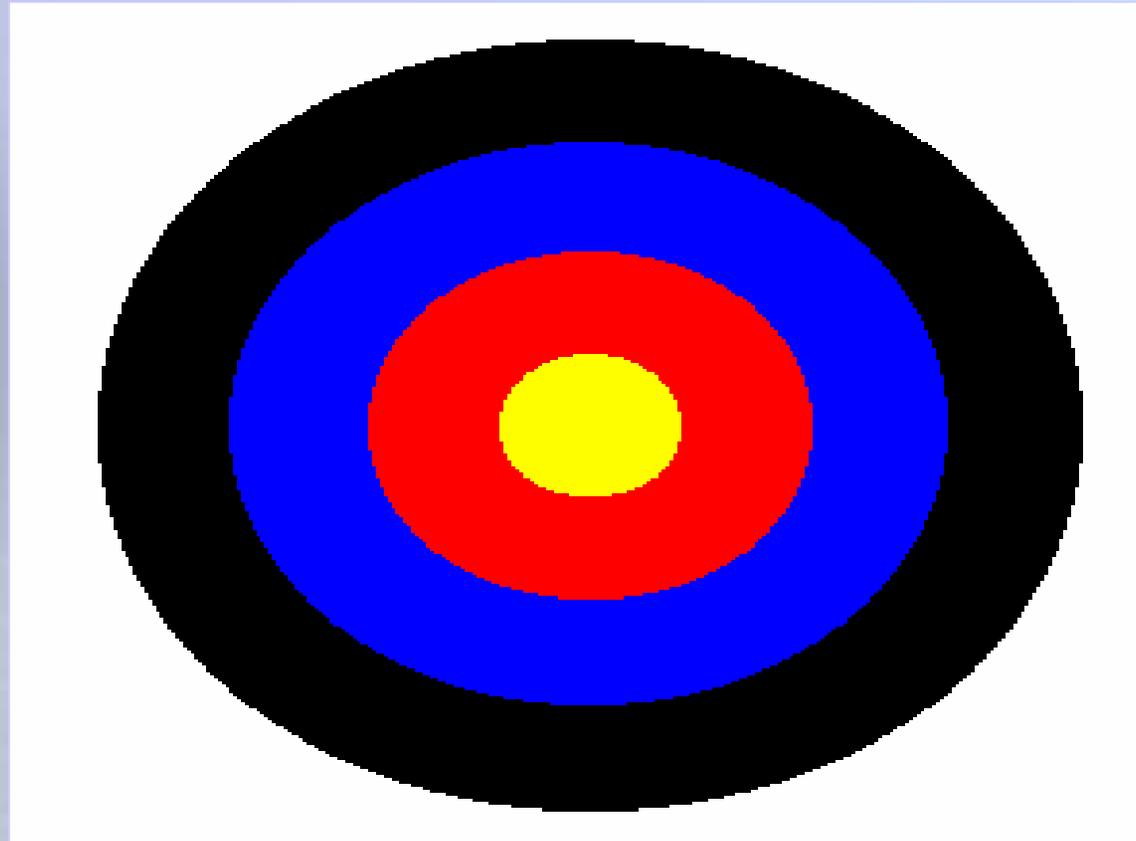
NO LONGER JUST DO OR DIE

NOW DO MORE WITH LESS OR DIE





DO YOU FEEL LIKE A TARGET?



August 8-11, 2004

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Maintenance Cost

vs.

Headcount Graph

Headcount



Maintenance Cost vs. Headcount Graph





Maintenance Cost

vs.

Headcount Graph



Headcount



Maintenance Cost

vs.

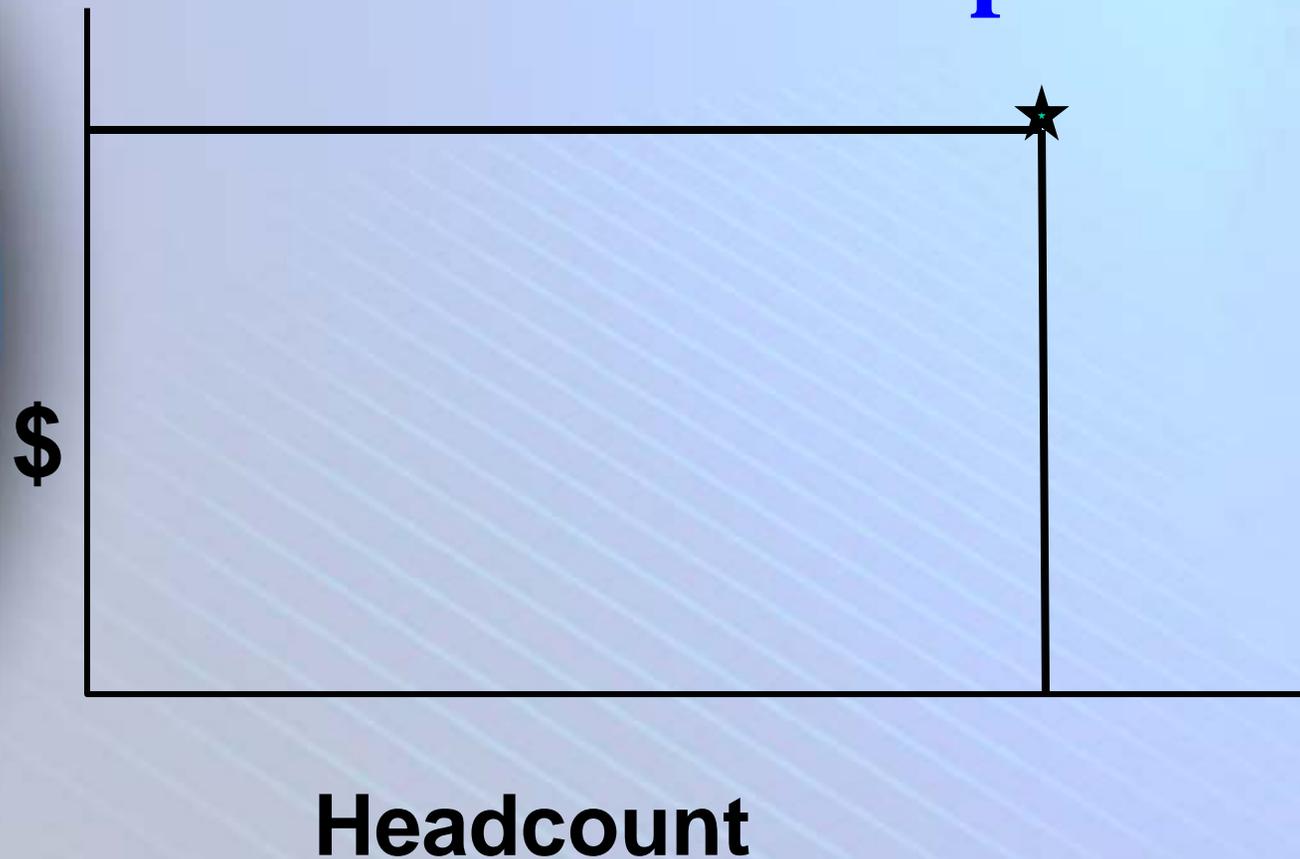
Headcount Graph



Headcount

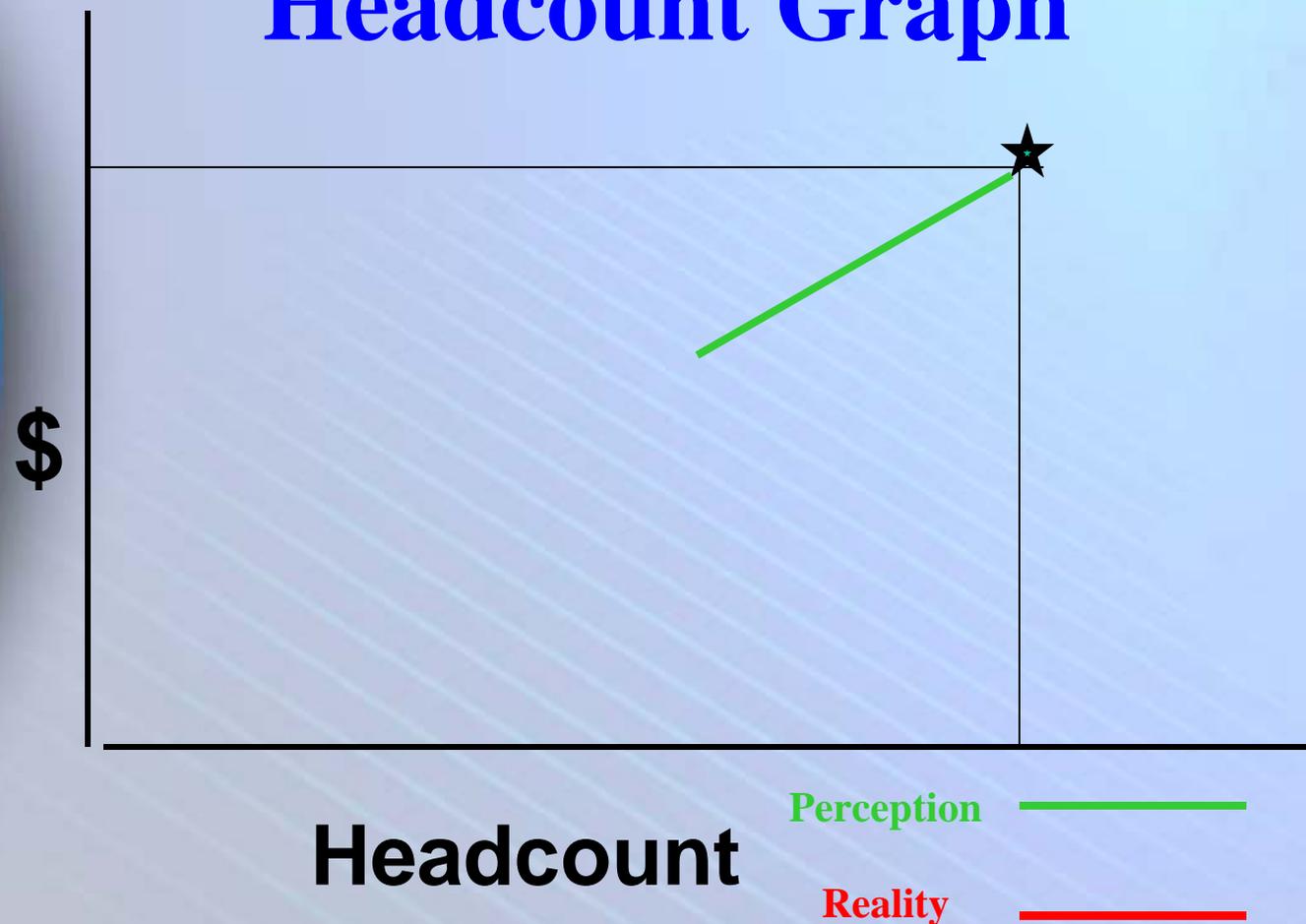


Maintenance Cost vs. Headcount Graph



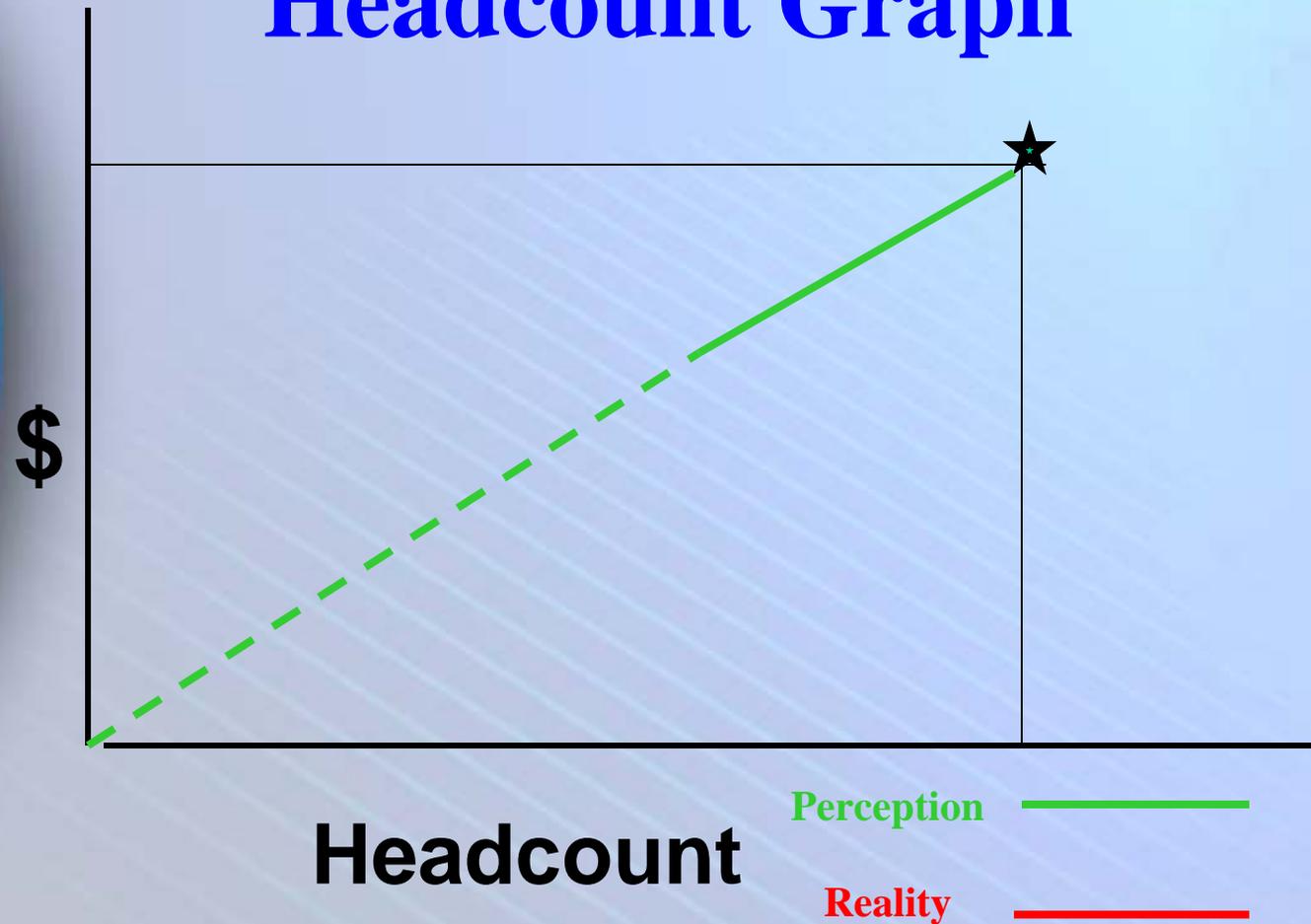


Maintenance Cost vs. Headcount Graph



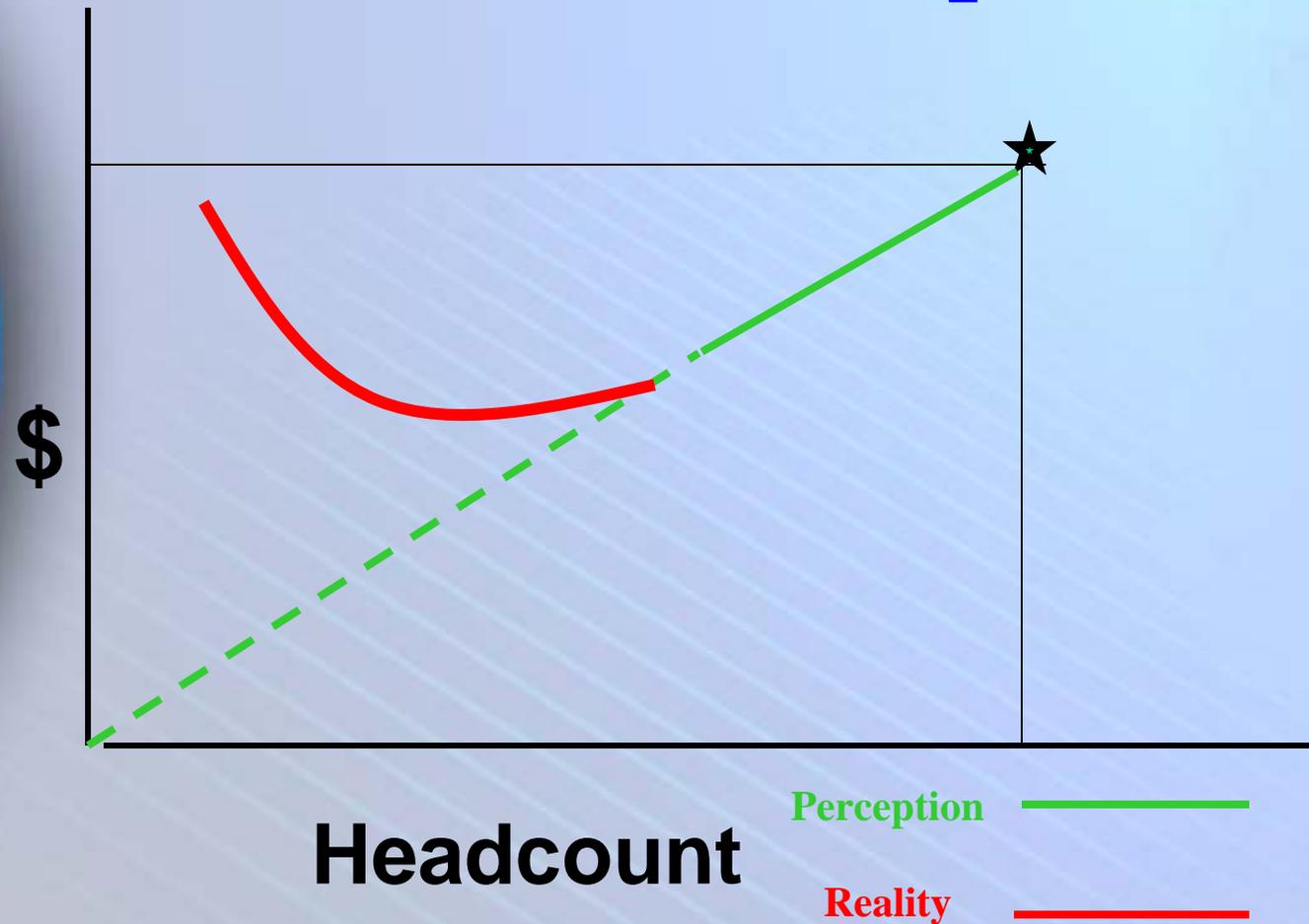


Maintenance Cost vs. Headcount Graph



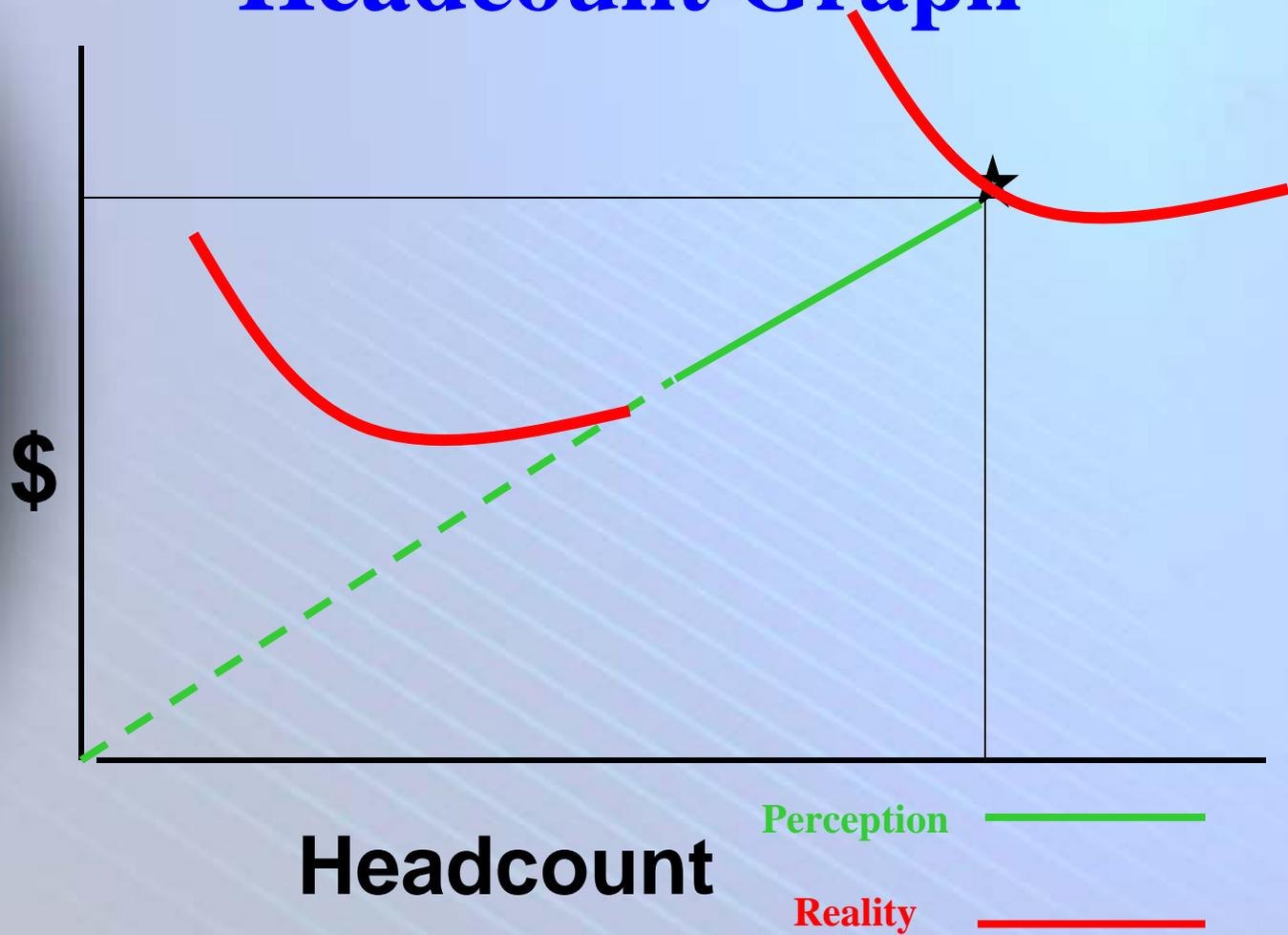


Maintenance Cost vs. Headcount Graph





Maintenance Cost vs. Headcount Graph





CHALLENGE PROVING OUR VALUE

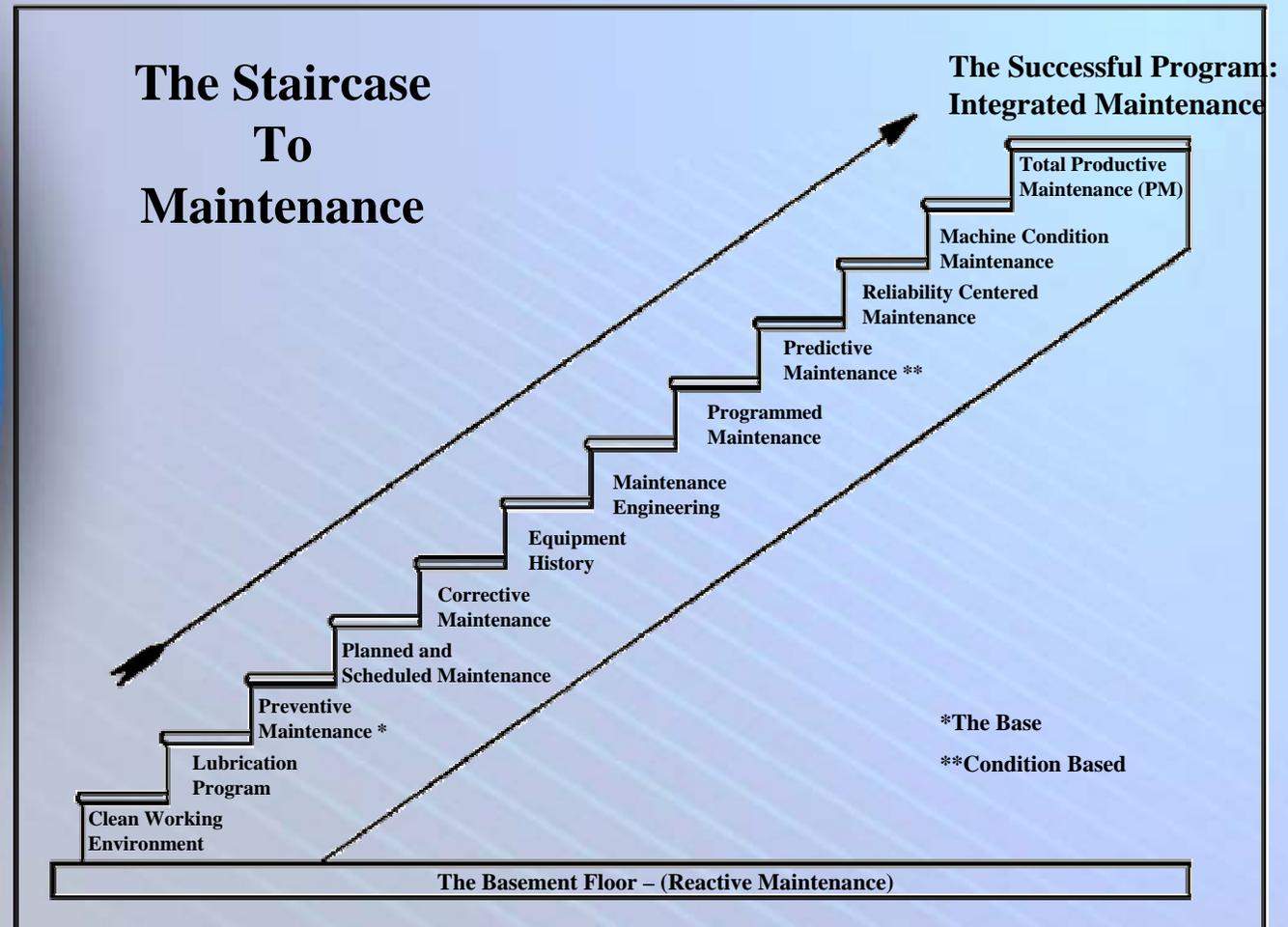
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STEP 1 HAVE A PLAN

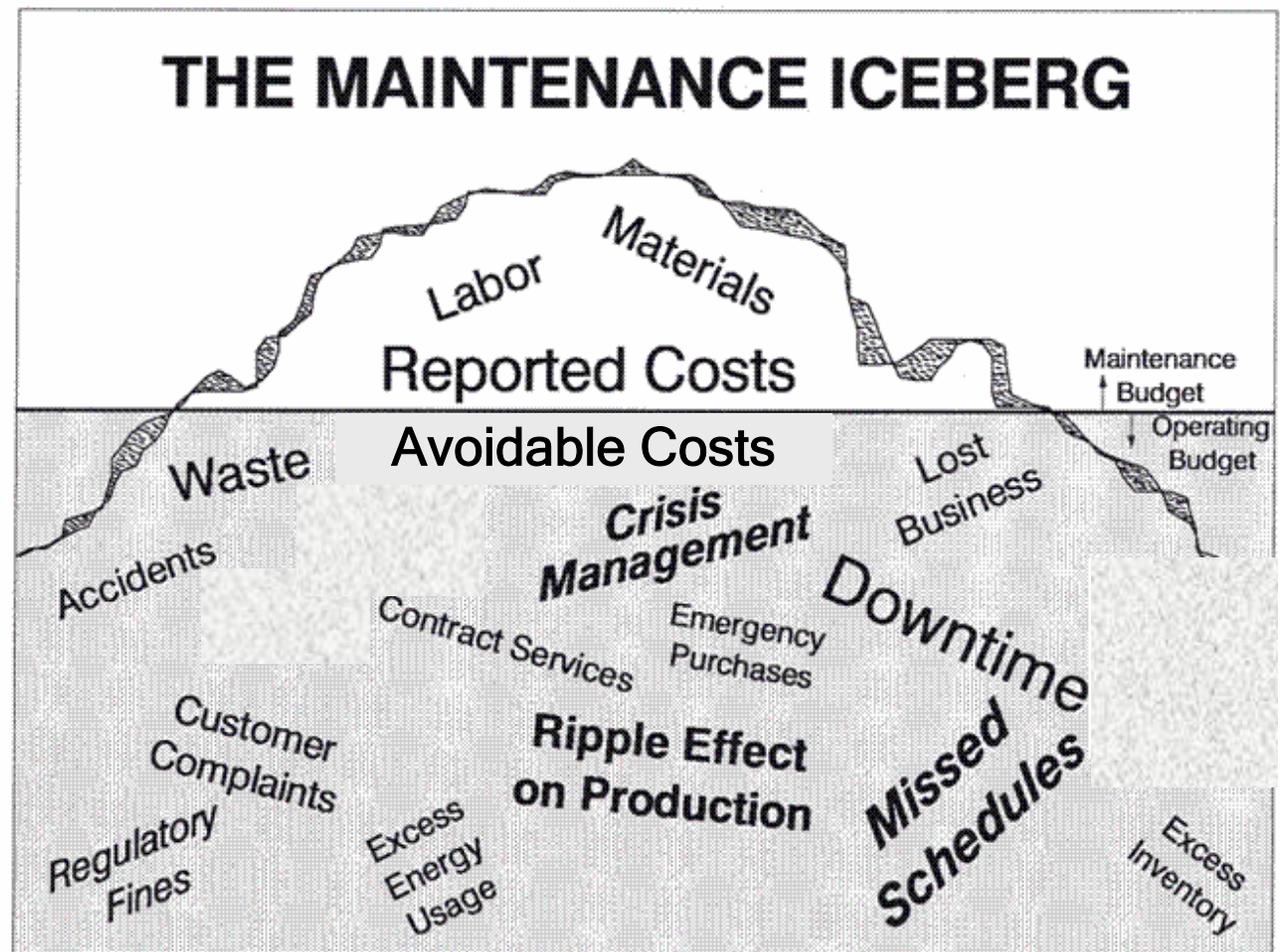




A NEW LANGUAGE: M-O-N-E-Y

$$\text{Value} = \frac{\text{Benefits}}{\text{Costs}}$$

Most organizations know the **COST**
of maintenance but not its **VALUE**.





EXAMINE EACH ICE CHUNK FOR VALUE (Example 1)

COST = \$X

Start Predictive Maintenance Program

BENEFIT = \$Y

Less Overhaul Costs

Less Downtime

Less Emergency Purchases



EXAMINE EACH ICE CHUNK FOR VALUE (Example 2)

COST = \$X

Install T-8 Fluorescent Lights

Throughout Building

BENEFIT = \$Y

Less Energy

Longer Lamp Life

FOR INSTANCE

Attitude Program had minimal cash involved and was developed and managed by management with some employee involvement (anyone could nominate an employee within their division).

Training in the department was continuous and added more opportunities in other areas, subjects that were closely tied to building and maintaining a positive attitude. Team building, goal setting, breaking down paradigms and improving interpersonal skills seminars were offered. More than 60 employees attended the Zig Ziglar in-person, four-hour success seminars where they had the opportunity to meet and be photographed with All employees also received specially designed t-shirts each year that said "DFS...Where Attitude Is the Difference", "110%" and "Quality is an Attitude" for their enthusiastic acceptance of the program. They were encouraged to wear them to work, which they did with pride.

DFS became licensed to offer its employees the entire "See You at the Top" training series and by the end of December, 1993, more than 70 employees were alumni of this 24-hour training program which basically focused on attitude. It was the cornerstone of DFS's quality program. By June 1994, 125 of DFS's employees completed this intensive "people skills" program and at least 400 county employees completed the program.

One important aspect of the program was that employees volunteered an hour per week of their personal time and Montgomery County matched it by approving an hour of administrative leave for the program.

Phase IV

In setting goals, you can only go as far as you can see, and then go from there. DFS had earned a good image and a good reputation for providing quality customer service. They also had an excellence program in place, based on Tom Peters' philosophy. DFS management decided that the "increments to excellence" program, where managers started each weekly staff meeting with a

quality accomplishment by each division, was very important and could be further improved and expanded to employees.

In July 1993 we implemented our "quality is an attitude" program, which focused on employee empowerment and

*By the end of the fiscal year,
250 employees produced 1,142
approved quality increments,
representing a savings/new revenue
of more than \$2.6 million, a
return on investment of more
than 125 to 1. Not bad,
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in the program was \$20,000.*

our vision of "100% employee involvement". The criteria included:

- Employee submitted a quality increment of excellence to his/her manager.
- Manager determined if the increment would be an improvement, savings or revenue producer and presented it at weekly staff meetings as a quality increment.
- If the idea was an improvement, a silver token was presented to the employee.
- When a savings or revenue was achieved, a gold token was presented to the employee.
- After the employee was rewarded five tokens, he/she was presented with a quality pin. If all five tokens were gold, a \$100 gift certificate was awarded.
- For every five additional silver or gold tokens, \$100 gift certificates were awarded, also.

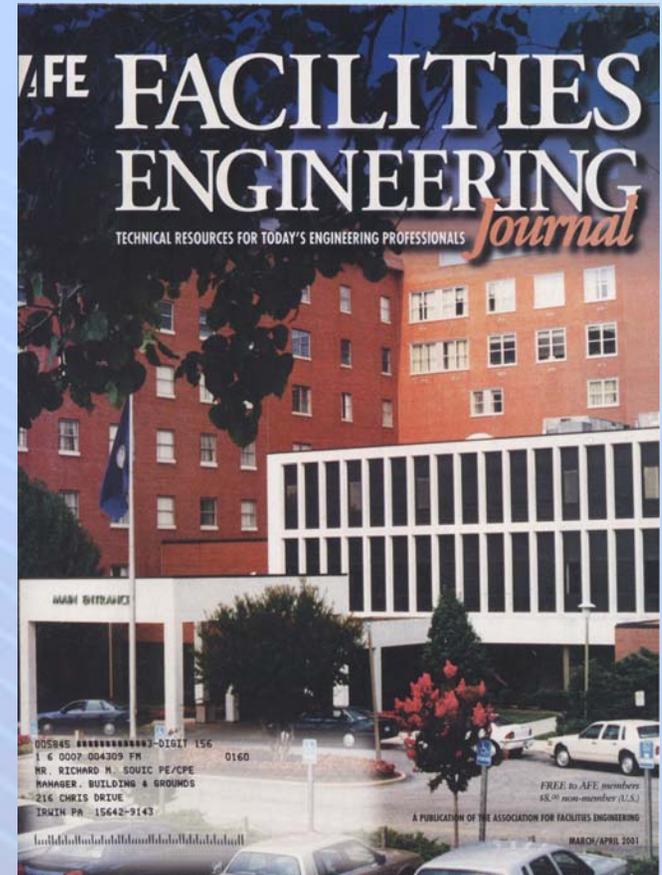
In early June 1994, all quality pin recipients, managers and the quality leadership team gathered and presented cash awards to those deserving employees who were awarded the most number of tokens. Most of the department's \$5,000 total monetary awards allocation from a non-departmental account was utilized for this program. This was in addition to nearly \$15,000 worth of gift certificates.

By the end of the fiscal year, 250 employees produced 1,142 approved quality increments, representing a savings/new revenue of more than \$2.6 million, a return on investment of more than 125 to 1. Not bad, considering the total investment in the program was \$20,000.

The next year, FY 1995, the department set a new motto: "10% more than '94". Employees who submitted six or more quality increments would be recognized with a 110% pin and cash awards, totaling more than \$30,000, where given out through the year. Eighty-eight percent of all employees submitted an approved increment and by year end, nearly 1,200 additional quality increments were accepted, adding more than \$2 million in additional savings/new revenue.

The county decided to invest in total quality management (TQM) throughout its 41 agencies/departments. In justifying the TQM program for the entire county (pop. 827,000), DFS was singled out for its innovative programs and for the results it achieved for implementing its in-house excellence and attitude programs. That recognition surely propelled our status in the organization and significantly affected our image.

In the first two years, the Department of Facilities Services was able to raise revenues by \$1.5 million per year and use its savings to pay for \$1.3 million per year in unbudgeted deferred maintenance, as well as all of its training. The total training budget was approximately \$30,000 an insignificant amount for a department with 250 total employees. Other county departments followed DFS's lead and many other good things happened. In early 1993, DFS's Attitude





BENEFITS TO BE CONSIDERED

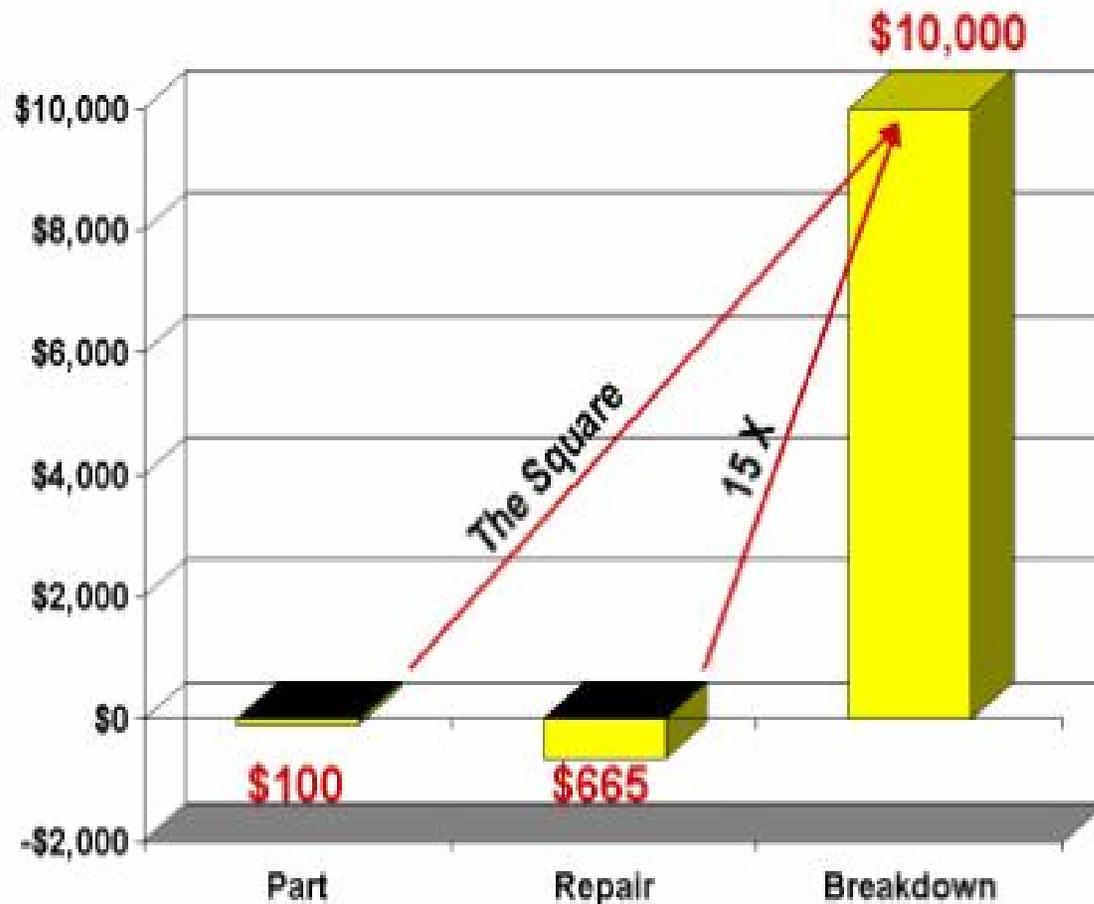
- ❖ Operational & Productive Capacity
- ❖ Energy Savings
- ❖ Downtime Avoidance
- ❖ Productivity Improvements
- ❖ Savings for Inventory Control Improvement
- ❖ Innovation / Maintenance Advancements
- ❖ Service Agreements for Base Level of Service
 - Chargebacks for services above “base”
- ❖ Life Cycle Cost Analysis
- ❖ Pay Me Now or Pay Me “More” Later Analysis



EXAMPLES OF BENEFITS STRICTLY MAINTENANCE

- ❖ Energy Use Reductions of Well Maintained Equipment **5-15% Savings**
- ❖ Good Maintenance Extends Capital Equipment Life **30-40% Longer**
- ❖ Inventory Management **20% Achievable**
- ❖ Implement Good CMMS **20-30% Savings**
- ❖ Inverse Square Rule for Deferred Maintenance **15 x Repair Cost**

Inverse-Square Rule for Deferred Maintenance



Whenever you defer a repair, you may be incurring a cost of 15 times that amount.



MONITORING PROGRAM BRAG BOARD



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**GO FURTHER IF
YOU DARE !!!**



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OPERATE AS A PROFIT CENTER

- ❖ Develop a Business Plan
- ❖ Measure and Report Your Maintenance Profit and Return on Investment
- ❖ Use Best Practices, e.g., Life-Cycle Costing



ADVANCED TECHNIQUES WITH ROI

- ❖ Failure Mode and Effects Analysis (FMEA)
- ❖ Reliability Centered Maintenance (RCM)
- ❖ Level of Repair Analysis (LORA)
- ❖ Availability, Reliability and Maintainability Analysis (ARM)
- ❖ Whole Life Costing (WLC)



MORE TIPS TO DISPEL THE MYTH

- ❖ Be a Good Manager
- ❖ Use Benchmarks
- ❖ Analyze Trends and KPI's – Take Appropriate Actions
- ❖ Talk Language of Financial People
- ❖ Be Bottom Line Oriented
- ❖ Look at Everything as ROI
- ❖ Dollar Saved Equates to \$10+/- in Sales for Most Companies
- ❖ Use a Digital Camera to Chart Your Progress



OTHER HELPFUL TIPS

- ❖ Create a Newsletter
- ❖ Establish Emergency Roamers (Triage Team to Set Priorities)
- ❖ Vendors Will Help if You Help Them
 - Be a Showcase Account and You Will Get Discounts, Extra Service and More Insights on How to Fully Use their Products
- ❖ Barter When You Can – Save Money
- ❖ Build Your Team's Morale & Company's Reputation by Volunteering Your Maintenance Services to Charities (Habitat for Humanity, Repair Old Churches, etc.)
- ❖ Develop Your Own Support or User Group From Other Pros in Your Field

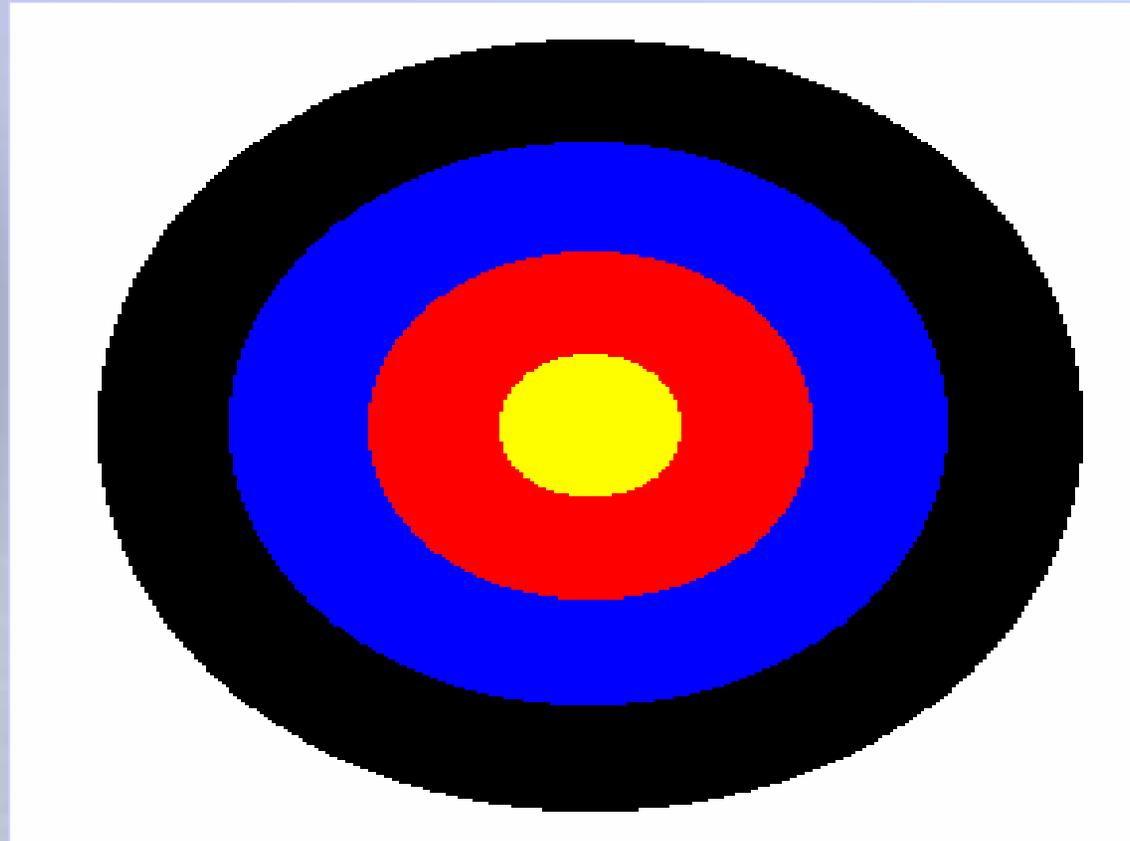


SUMMARY

- ❖ Think Value, Value, Value!
- ❖ Have a Plan
- ❖ Use KPI's and Benchmarking
- ❖ Make Steady Progress
- ❖ Measure and Manage
- ❖ Talk the Right Language
- ❖ Advertise Results



TRANSFORM THE TARGET INTO.....



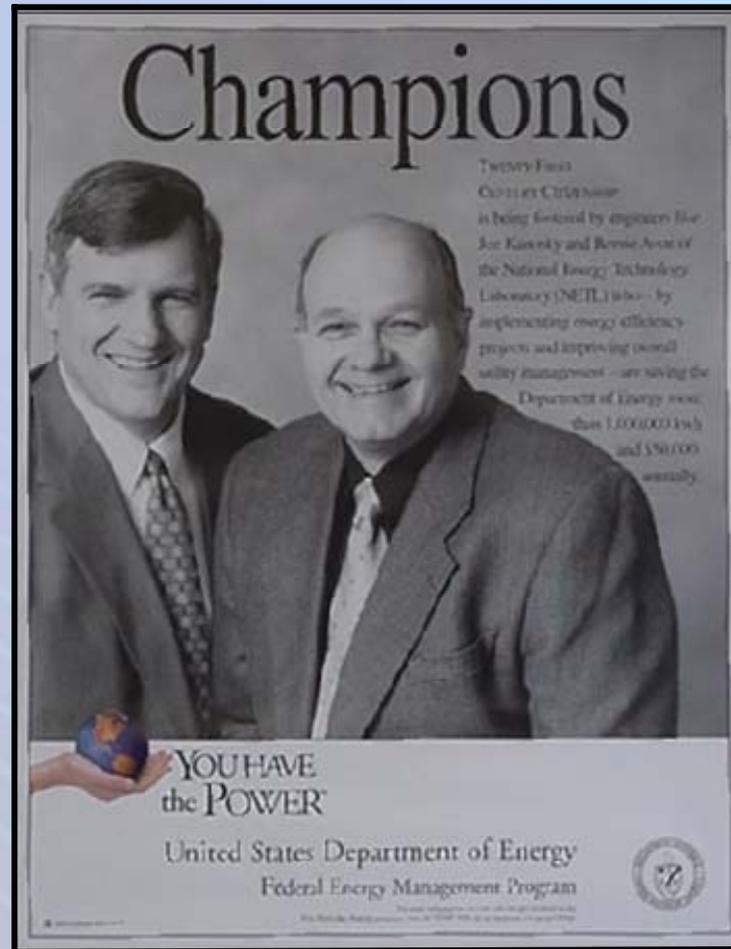
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A STORY OF SUCCESS



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OR

AWARDS OF EXCELLENCE



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"The only man who never makes a mistake is the man who never does anything."

-Theodore Roosevelt

"What you focus on grows."

-Terrence O'Hanlon

"Perform a root cause SUCCESS analysis – Learn from your successes."

–Joel Leonard



QUESTIONS

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