

# Clean Air Engineering

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To be recognized, worldwide, as the company providing  
the highest value products and services  
for air quality management.

# Today's Overview

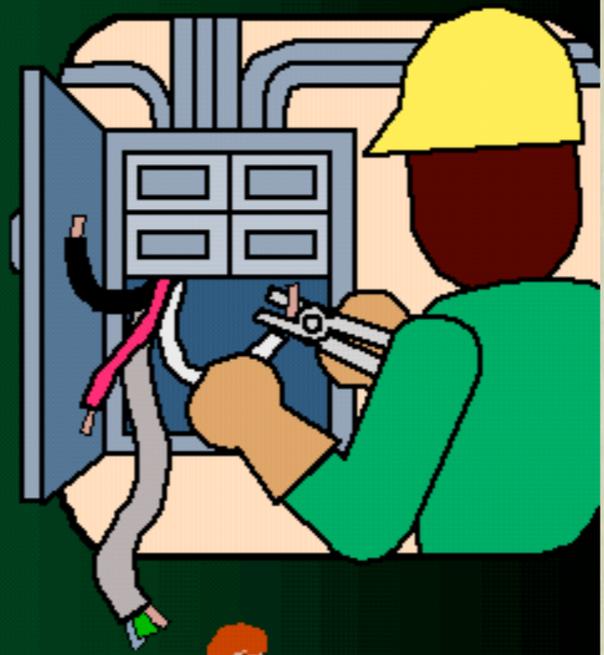
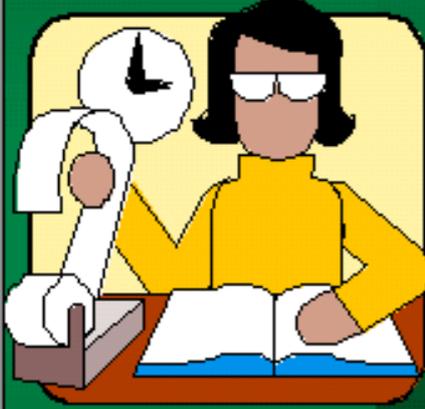
- Safety - Priority 1
- Integrity - Including our Values
- Quality - Commitment + Methods + Training
- Metrics
- Products and Services
- Philosophy
- Strategy and Tactics
- Team Model

# Priorities

- #1 Safety
- #2 Integrity - Including our Values
- #3 Quality - Value - Profit
- #4 The Environment
- #5 Growth
- #6 Throughput - TOC -

# Organizational Overview

- TEAM WORK

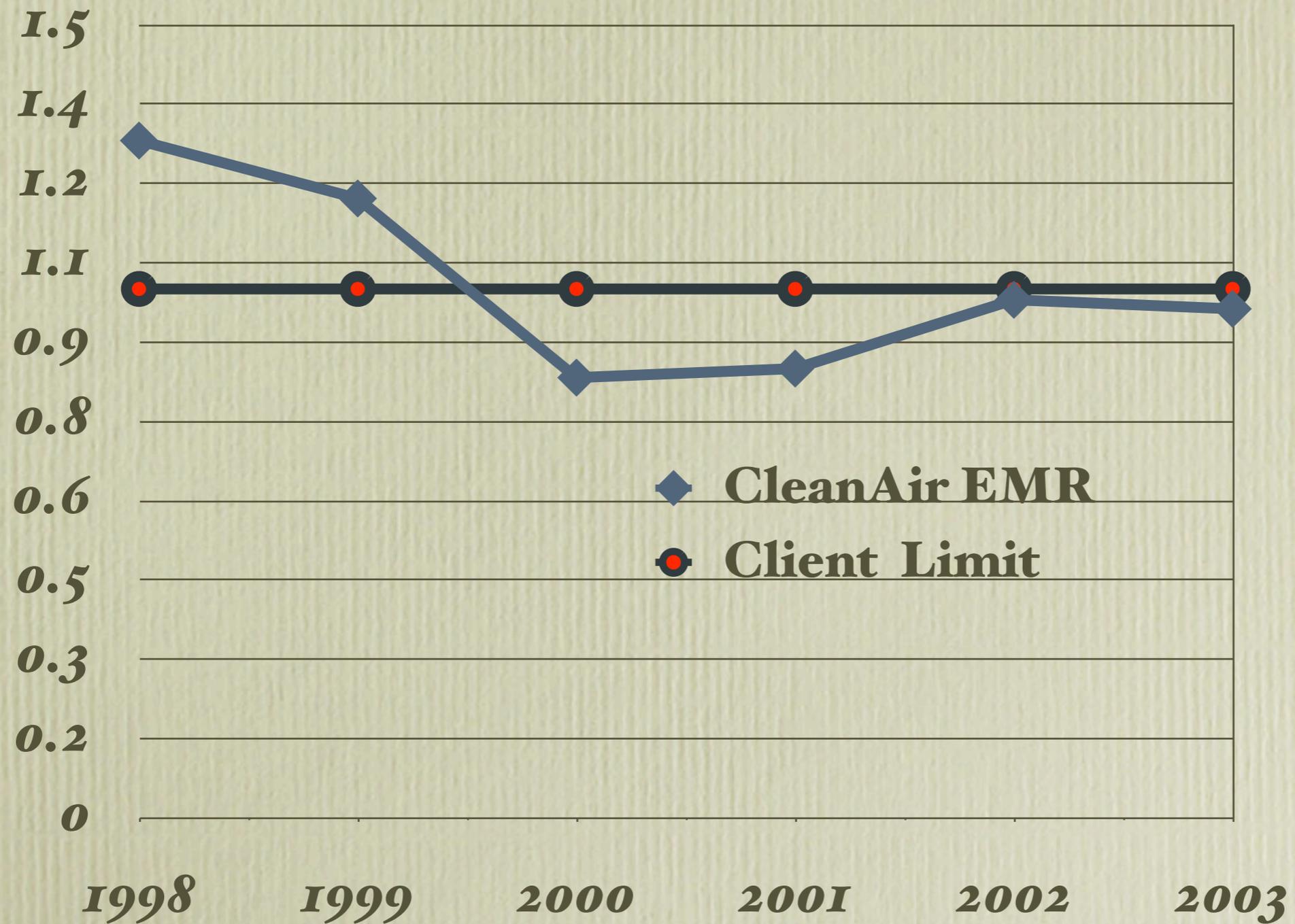


# New Employee?

- According to data\* from OSHA, the most dangerous time on the job is the first year on assignment?
- In other words YOU are our highest risk for an injury.

\* Not quality assured.

# Experience Modification Rate



# Overview - Quality

- Constant Improvement of Everything
- Culture of Commitment to Truth
- Willingly Share Knowledge
- We Use Defined Methods
- We Keep it Simple
- Push & Pull
- Friends

# Overview - Quality

- Constant Improvement of Everything - BWM?
- PDSA - Plan Do Study Act
- TOC - Eliminate main "Constraint"
- RCA - Eliminate Root Cause
- SPC - Get processes in control (3 sigma)
- Commitment to Q

# Overview - Quality

- Constant Improvement of Everything
- **Culture of Commitment to Truth - not easy!**
- Willingly Share Knowledge
- We Use Defined Methods
- We Keep it Simple
- Push & Pull
- Friends

# Overview - Quality

- Constant Improvement of Everything
- Culture of Commitment to Truth
- **Willingly Share Knowledge - Grow Team CleanAir**
- We Use Defined Methods
- We Keep it Simple
- Push & Pull
- Friends

# Overview - Quality

- Constant Improvement of Everything
- Culture of Commitment to Truth
- Willingly Share Knowledge
- **We Use Defined Methods - Over 3000 documented methods**
- We Keep it Simple
- Push & Pull
- Friends

# Overview - Quality

- Constant Improvement of Everything
- Culture of Commitment to Truth
- Willingly Share Knowledge
- We Use Defined Methods
- **We Keep it Simple - One Page is Best!**
- Push & Pull
- Friends

# Overview - Quality

- Constant Improvement of Everything
- Culture of Commitment to Truth
- Willingly Share Knowledge
- We Use Defined Methods
- We Keep it Simple
- **Push & Pull - Feedback & Feed Forward**
- Friends

# Overview - Quality

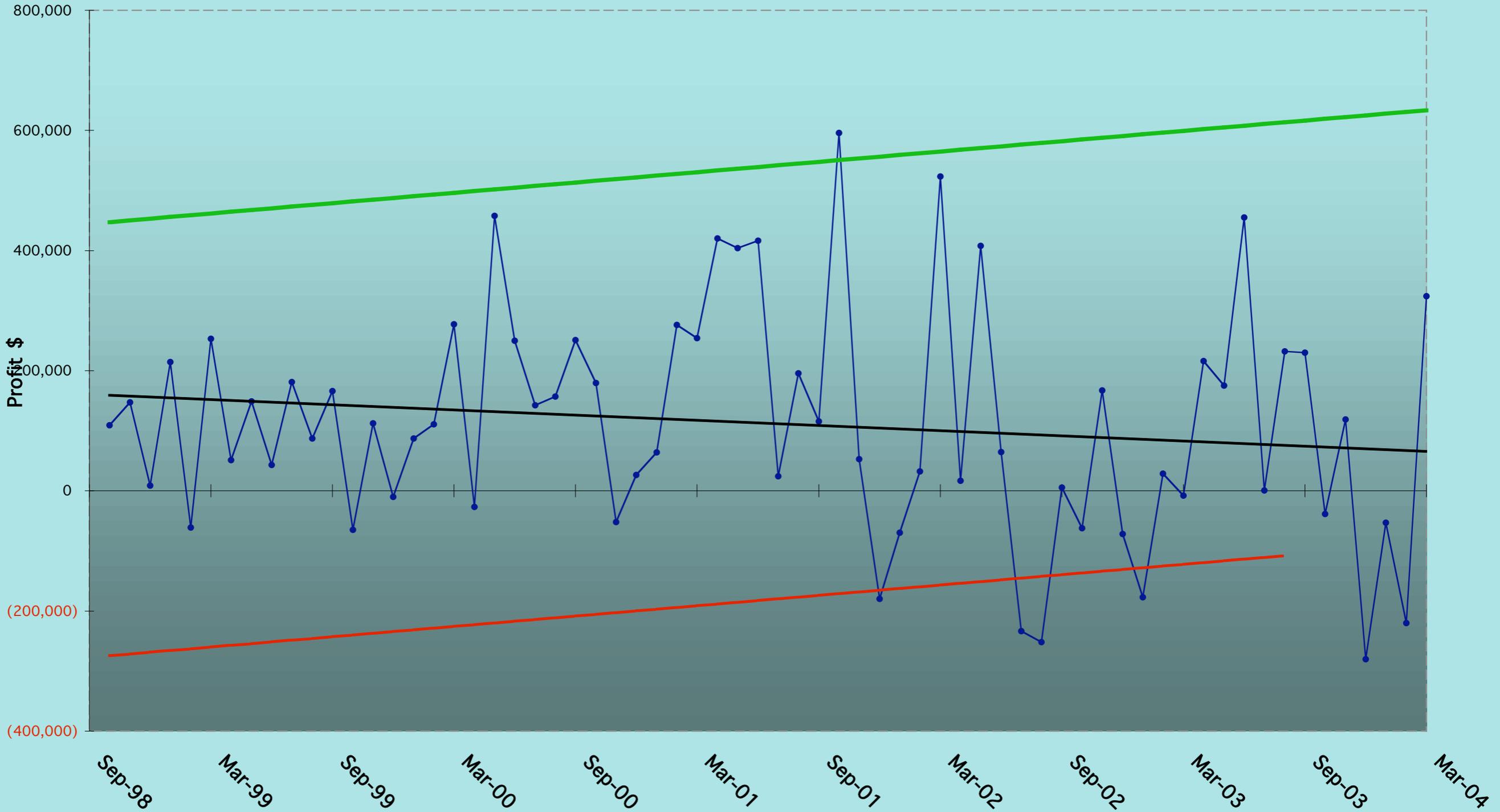
- Constant Improvement of Everything
- Culture of Commitment to Truth
- Willingly Share Knowledge
- We Use Defined Methods
- We Keep it Simple
- Push & Pull
- Friends give friends feedback!

# Quality Metrics

- Customer Feedback & Calls
- Green - Yellow - Red- dots
- Smiley - Frown - UCK
- Value Measurement
- Credit for Warranty
- Late payments & A/R aging

# Profit Metric

## Monthly Profit SPC Chart with Trend



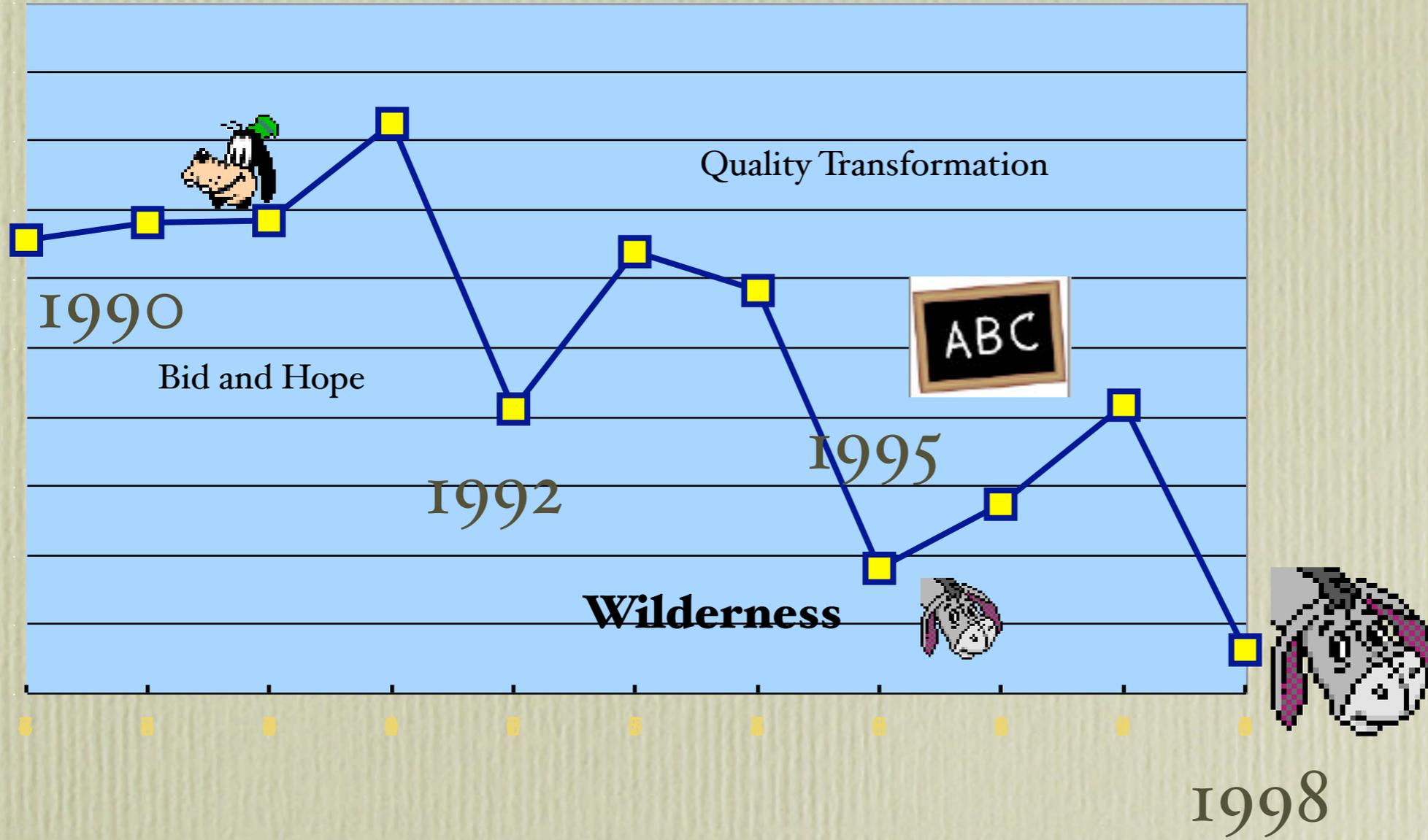
Profit Metric



Bid and Hope



# Profit Metric



# Profit Metric

## Yearly Profit vs Sales



# Products and Services

- We lead with Air Quality Management
- Our Market Targets Define our Products
- We Don't Target the Middle
- We have a Synergistic System

# Overview - Philosophy

- Original Philosophy
- Motorola Deming Others 1991- 1996
- Current Philosophy
  - Our Aim
  - Our Values
  - Our Vision & Credo
- Not as easy as it looks!

# Overview - Strategy

- **Corporate AIM - Value target is 10X invoice**
- Level Sales
- Spread Political Risk
- Work Higher Up
- Sell Our Unique System Advantages
- Deliver Better Data

# Overview - Strategy

- Corporate AIM
- **Level Sales - Use capacity every quarter**
- Spread Political Risk
- Work Higher Up
- Sell Our Unique System Advantages
- Deliver Better Data

# Overview - Strategy

- Corporate AIM
- Level Sales
- **Spread Political Risk - More international work.**
- Work Higher Up
- Sell Our Unique System Advantages
- Deliver Better Data

# Overview - Strategy

- Corporate AIM
- Level Sales
- Spread Political Risk
- **Work Higher Up - Move out of purchasing.**
- Sell Our Unique System
- Deliver Better Data

# Overview - Strategy

- Corporate AIM
- Level Sales
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- **Sell Our Unique System Advantages**
- Deliver Better Data

# Overview - Strategy

- Corporate AIM
- Level Sales
- Spread Political Risk
- Work Higher Up
- Sell Our Unique System Advantages
- **Deliver Better Data - Target clients that care.**

# Tactics



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- Too numerous to learn in 20 minutes.
- <http://www.cleanair.net/System/Direction/CleanAir%20Tactics.html>

# The CleanAir Tactics

**Company Confidential - Do not disclose or discuss these concepts outside of CleanAir!**

- **Business Tactic - Part 1**

**Explore & Discover - Identify New Market Opportunities**

**Inspect - Identify Our Core Competencies**

**Align - Identify Market Needs For These Core Competencies**

**Rearrange - Package Competencies For Competitive Advantage**

**Pilot - Confirm Market Case For Package (Use Client's Metrics of Value)**

**Specify - Identify Target Client Characteristics**

**Market Research - Find All Target Clients**

**Advertise - Communicate Message To All Target Clients**

# The CleanAir Tactics

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- **Business Tactic - Part 2**

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**Sell - Create More Demand Than Can Be Met**

**Have Guts!! - Manage Sales at Capacity Using Price To Maximize Profits**

**Deliver - Exceed Customer Expectations Using Defined Processes**

**Reinvest - Use Most Profits To Grow Business**

**Create - Invest Some Profits In Innovations To Stay Ahead Of Competition**

**Switch - Bale When Profits Dip Below LCL Or Stays Below Desired Profit For 3 Consecutive Quarters. Start a new team.**

# The CleanAir Tactics

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- **Relationship Tactic**

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**Explore & Discover - The best market opportunities are helping our present clients who get it. We must build trust so that they will share the information we need to identify their constraints and market opportunities.**

**Pilot - We should use our most trusted clients for pilots to protect our proprietary technology and to identify value.**

**Reinvest - We must reinvest profits to benefit our business partners.**

**Create - We need to innovate using all tools available. Partners are a great source of ideas. Encourage, listen and act.**

# **The CleanAir Tactics**

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- **Globalization Tactic**

**Intro - Establish name recognition using distributor(s) for products.**

**Beachhead - JV or acquire small engineering service company to start a beachhead.**

**Replicate - Plan and schedule for each major market worldwide.**

# The CleanAir Tactics

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- **Quality Tactic**

**Define - Identify System And Boundaries.**

**Low Hangs - Identify Major UDE's And Constraints And Fix using root cause analysis.**

**Interfaces - Identify Stake-holders.**

**Identify Stake-holders Main Quality Indicators (QI's)**

**Data - Select Measurement Which Encompass As Many QI's As Possible**

**CI - Constantly Improvement Of Processes By Those In The System (Self Directed Teams).**

**Innovation - Management Uses Skunkworks For Paradigm Shift Or Process Reinvention**

# The CleanAir Tactics

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- **New Team Tactic**

We use the W. L. Gore & Associates Amoeba Principle for New Teams. See: [Error! Hyperlink reference not valid.](#)

**In addition to a champion a team needs:**

**Entrepreneur or Business Leader**

- **Technical Leader**
- **Sales or Market Leader**
- **D.I.S. and C. bases covered**

**Since team members can wear several hats the team can start with as few as one full time and 2 part-time members.**

# The CleanAir Tactics

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- **Day to Day for Everyone**
  - **Understand the CleanAir Tactics.**
  - **Be constantly aware that everyone's job is to know and support the steps in the Tactics.**
  - **Provide feedback for all steps in the CleanAir Tactics.**

# Overview - Team Model

- **Team Sub-Culture**
- Processes
- Methods and Procedures > 3000
- Incentives - (mainly intrinsic)
- Policies ( OK unless forbidden)

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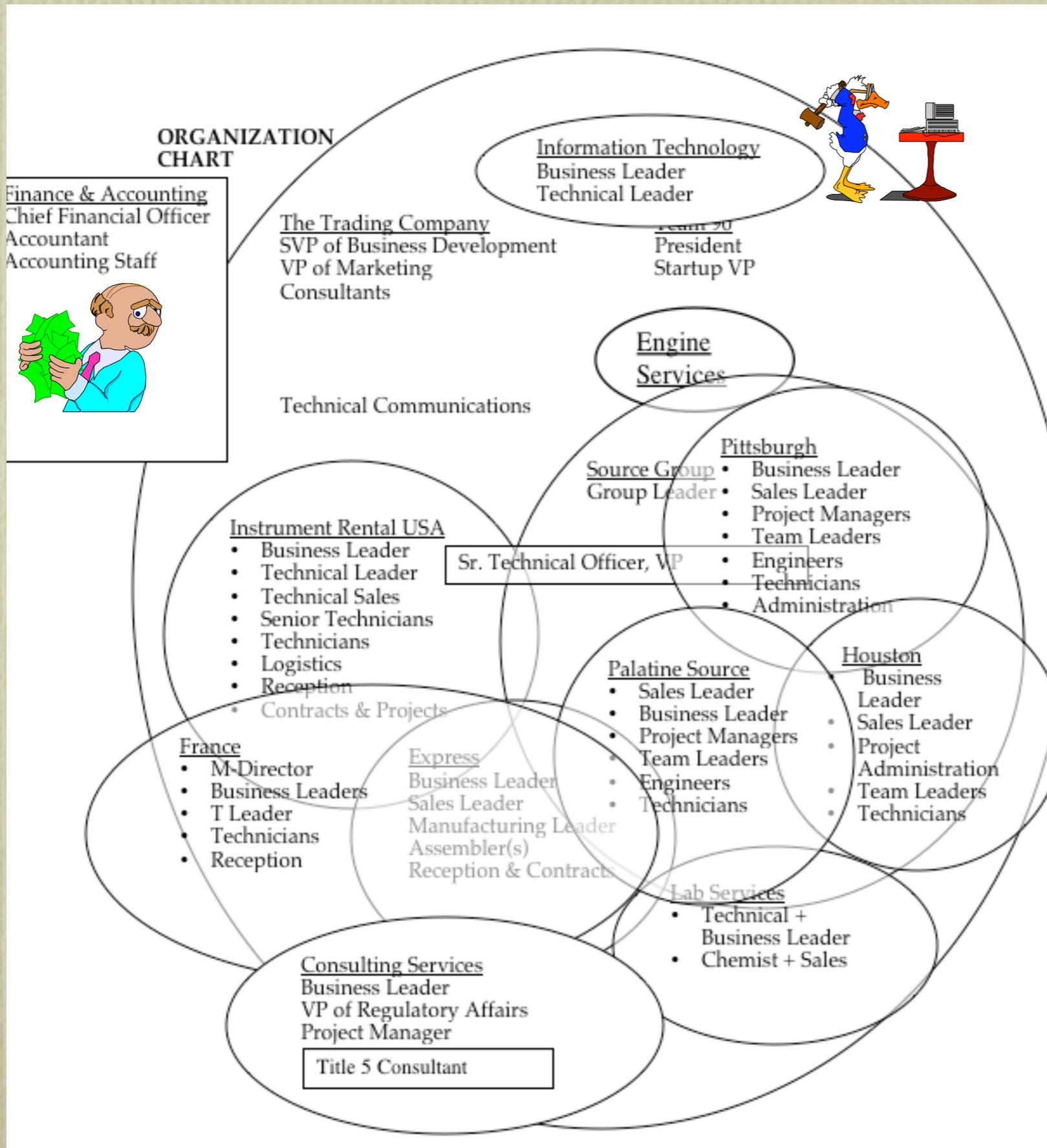
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- Team Sub-Culture
- Processes
- Methods and Procedures > 3000
- Incentives - (mainly intrinsic)
- Policies ( OK unless forbidden)
  - Innovation & risk taking are encouraged.

# Team Organization Diagram



# Overview - Differentiators

- We are focused on delivering maximum value
- We are not a low price provider
- We have a System & Sub-Systems tuned for value
- Our teams support each others value
- We don't compromise our Values or Q

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# Our Target Customer Profile

- They are not commodity driven
- They have a lot to gain or lose and they know it
  
- We have a process for identifying them
- They are the generally the top 1 or 2 quality companies in their industry
- We are proactive on partnershpping
  
- Not all industries have a Q driven company

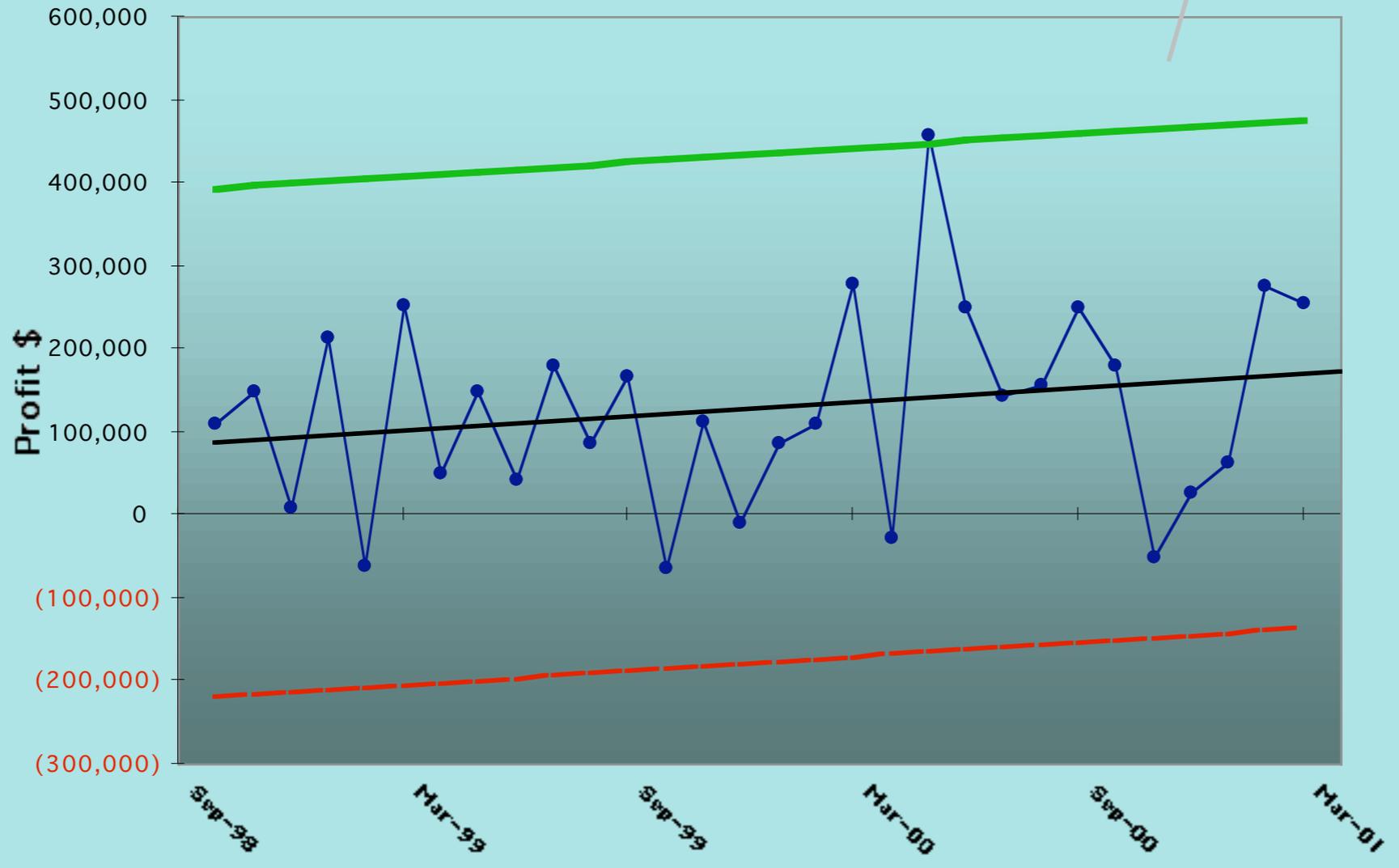
# Financial Performance

- Sales
- Profit
- Growth

# Profit

- Long Term Profit is always in focus
- We eliminated end of quarter penny wise thinking
- We use trailing 12 months to start a new year ever month and every quarter

Profit SPC Chart with Trend



# Growth

- By necessity we put Equity Creation ahead of Revenue Growth
  - We learned!!

# Culture

- Professional
- Work hard
- Play hard
- We consider CleanAir a Family
- Take Pride in what we do

# Policy

- Worldwide limited to 10
- USA employee handbook
- Team and HR Procedures

# Incentives



- Pain & Profit Sharing
- Profit Sharing for Teams
- 401(k)
- Accumulated Time & ATO or PAID
- Intrinsic Pride

# Innovations

- Partnerships
- Products
- Services

# Constraints/Problems/Opportunities

- Problems are classified
  - Common Cause
  - Special Cause
- We eliminate root of Special Cause Errors (when?)
- We improve systems to eliminate Common Cause
- We open constraints (Bottlenecks) (see TOC)

Our best asset is the worldwide need for....

**CleanAir!**



# Feedback on Indoctrination

- What is the order of importance?
- List the 6 highest in order of importance.
- List the CleanAir values.
- Define CleanAir High value.
- Where & how would you do you share ideas?
- How do you plan to impact CleanAir?

# Feedback on Indoctrination

- Who do you work for?
- For the purpose of this feedback, who is your client?
- Explain the following:
  - PDSA
  - TOC
-

# Feedback on Indoctrination

- Why do we use DISC ?
- Are you a high D,I,S or C ?
- What is your DISC pattern?
- According to DISC what is:
  - “Your Value to the Organization”

# Strategic Process Owner Opportunity List

- S.P.I.N Training - \_\_\_\_\_
- ASTM Internal Audits - \_\_\_\_\_
- Narrow the Focus - \_\_\_\_\_
- Deming Revisited - \_\_\_\_\_
- Cleanair System Component Trainer - \_\_\_\_\_
- New Team - \_\_\_\_\_

# Evangelist Opportunity List

- Values - \_\_\_\_\_
- Integrity - \_\_\_\_\_
- Culture - \_\_\_\_\_
- Innovation - \_\_\_\_\_
- Word Wide Standardization - \_\_\_\_\_
- Leadership - \_\_\_\_\_

The End.