

# Leadership Skills for Engineers

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Presented to

**PE-NC**

by

**Rich St.Denis**



# Our Topics

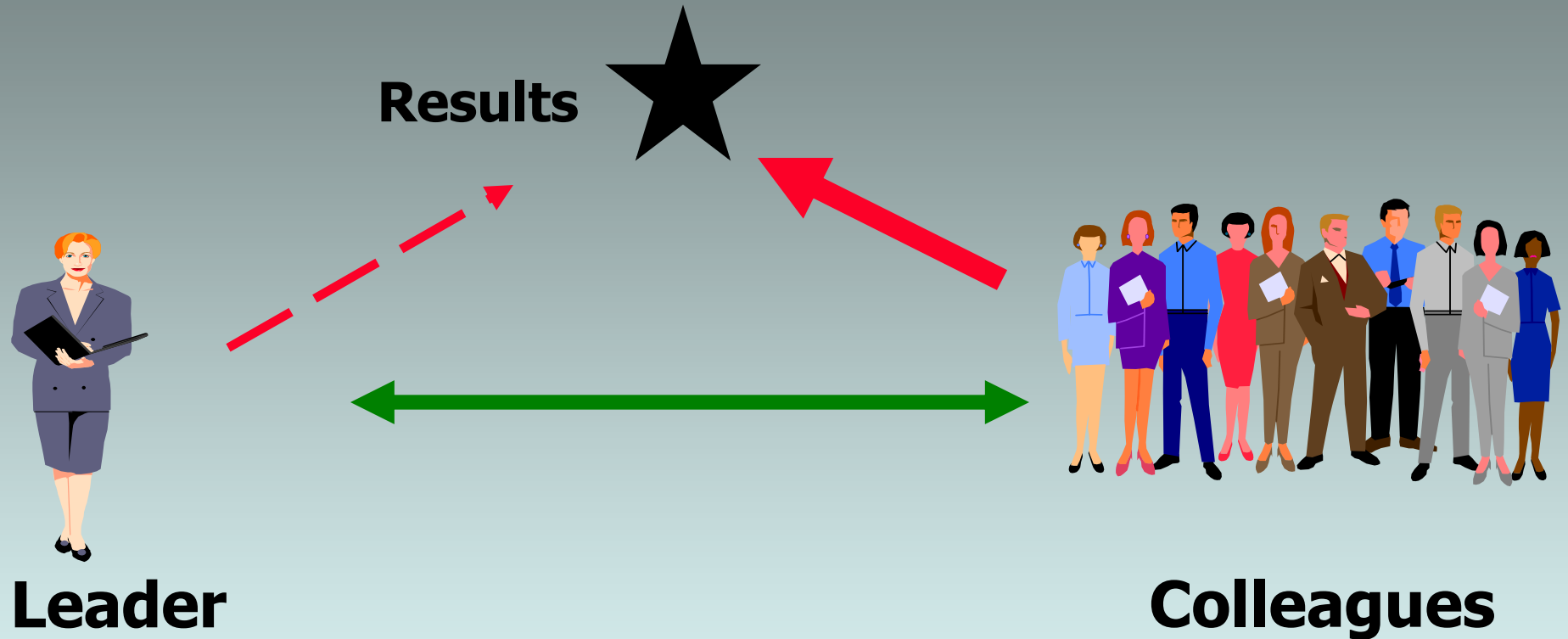
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- **What is Leadership**
- **Why Should It Matter to Engineers**
- **How Does Leading Differing from Managing**
- **What are the Measures of Leadership Success**
- **What are the Five Roles of the Leader**
- **What are Best Practices for Leading Well in Each Role**

# What Exactly is Leadership?



# What is Leadership?



***The process of envisioning and influencing a positive change through others***

# Who are Leaders - Past and Present- You Admire?



# The Leadership Process



Leadership is a process—  
a set of steps we can master.

1. Envision what is to be accomplished.
2. Take responsibility to make it happen
3. Influence and motivate others to get involved
4. Coach and empower them to succeed—

...All in the quest to produce a positive change

# Leading differs from Managing

## Leading

Visioning

Setting Direction

Influencing → Delegating →

Inspiring

Empowering

Coaching

Developing relationships

*To produce positive change*

## Managing

Planning

Defining Action Steps

Organizing

Requiring

Controlling

Resourcing

Building stable systems

*To produce stability*

# **The Measures of Leadership Success**

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- 1. The results desired by the leader are achieved**
- 2. There is improvement in people and the team.**

***Leadership is not about being great.  
It's about getting others to be great.***

**--President Ronald Reagan**

# **Five Roles of the Leader**

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**Leaders enact several roles:**

- 1. Role Model**
- 2. Visionary**
- 3. Motivator**
- 4. Coach**
- 5. Change Agent**

# Leadership Role #1: The Role Model

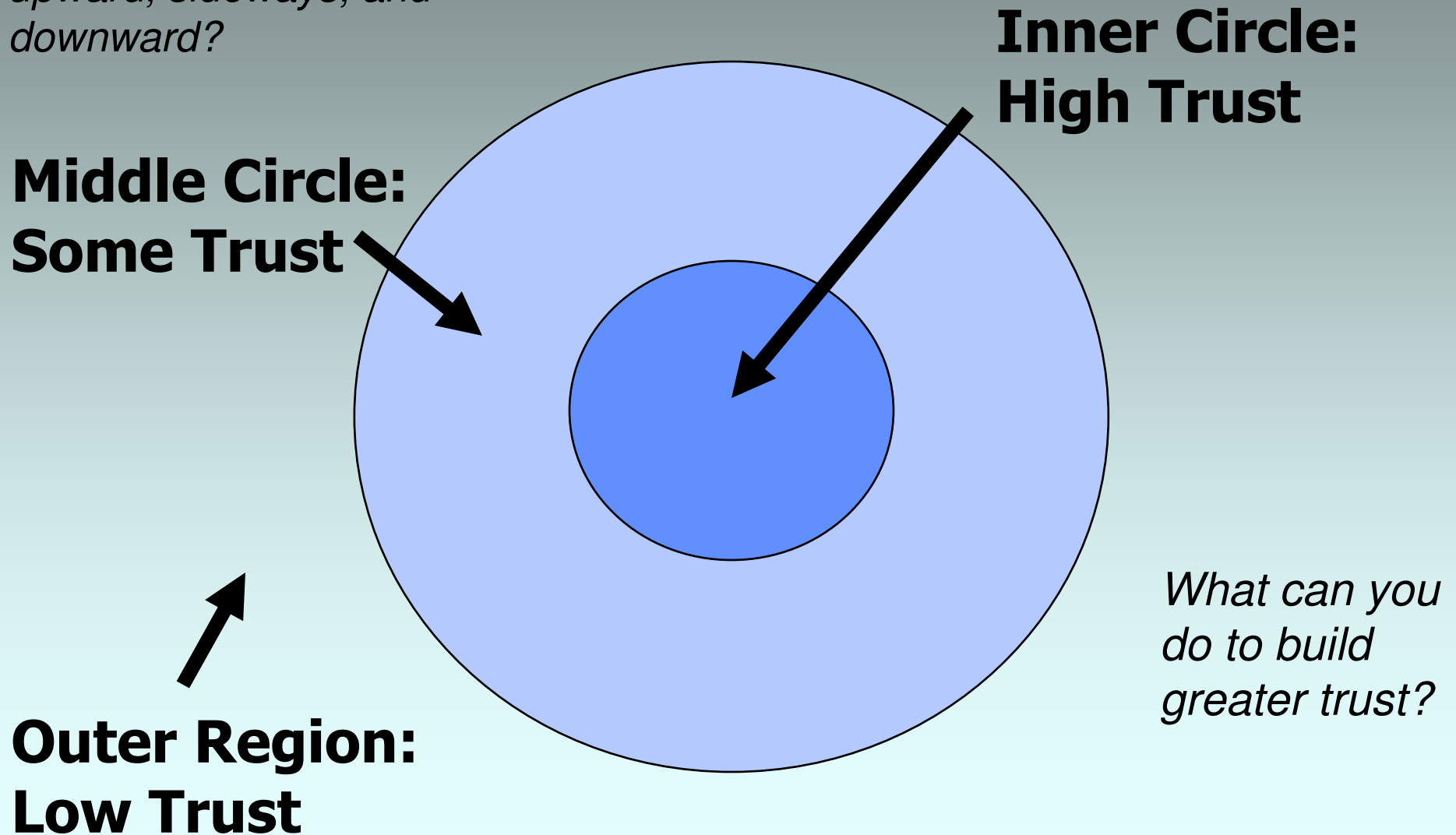


# **Leaders are role models who set the example.**

- Setting the example helps to set expectations on what should be done and how it should be done.
- Setting the example also earns trust.
- Trust leads to influence over people.
- Influence over people allows you to lead.
- Without trust, you cannot lead.

# Leaders draw people into the Inner Circle of High Trust

*What is your level of trust upward, sideways, and downward?*



# How to Set the Example and Earn Trust

*Trust is the Foundation of Influence and Leadership*

**Trust is the result of --**

- **Showing competence in what you are doing.**
- **Showing character is how you do things.**
- **Showing caring for others.**
- **Minimizing the risk for others.**

# Leadership Role #2: The Visionary



# **Leaders are visionaries who set the direction.**

- They see the currently reality clearly.
- They then envision a desirable future to make things better.
  
- They set the strategic (big-picture) direction.
- Then they set the tactical direction by delegating responsibility and authority and setting expectations.

# How to Set the Strategic Direction



## Articulate the Mission

*What is our Core Purpose?*

*Who is our Customer?*

*What Value Do We Bring Them?*

## Describe The Vision

*What do we dream of achieving?*

## Establish the Values

*What principles and behaviors  
will we cherish and uphold?*

# How to Set the Tactical Direction

To set the tactical direction, delegate responsibility and authority and set expectations. To do so—

**R** Describe the reason for delegating

**R** Define the responsibilities to be assumed

**A** Specify authority to be given

Type -- Level -- Duration

**M** Define measures of success to be met

Goals -- Performance Metrics -- Deadlines

**P** Describe potential problems to be avoided

**S** Provide support

Resources – Coaching -- Follow-Up



# **Leadership Role #3: The Motivator**



**Leaders create the right  
conditions for high motivation.**

**The inspire others to work hard  
towards the desired results.**

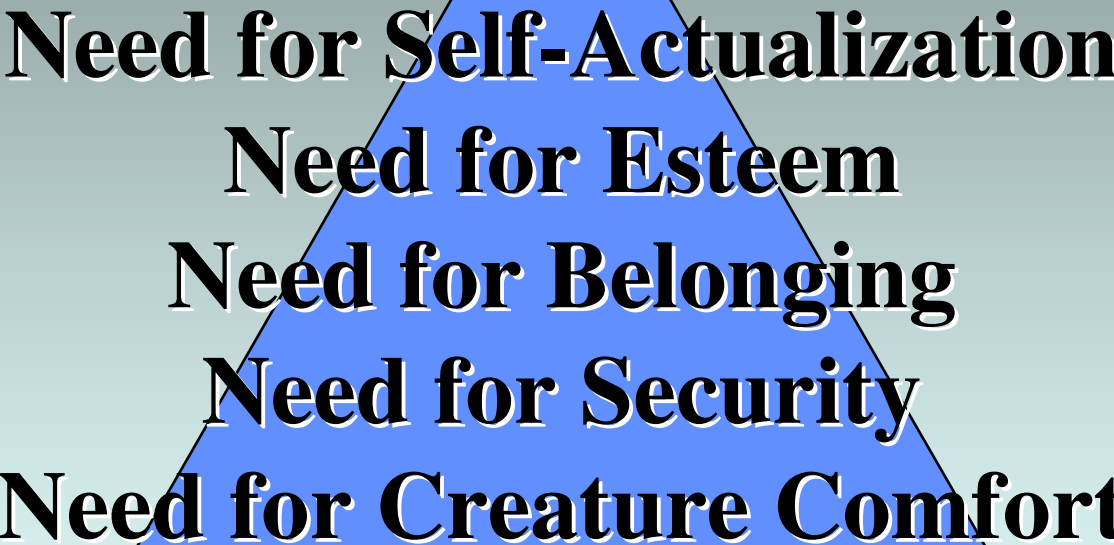
<b>Leaders understand the Relative Importance of Motivational Factors</b>	Survey Results	Manager Ratings	Difference 42
Good Working Conditions	9	4	5
Feeling "In" on Things	2	10	8
Tactful Disciplining	10	7	3
Full Appreciation	1	8	7
Management Loyalty	8	6	2
Good Wages	5	1	4
Promotion and Growth	7	3	4
Help w/Personal Problems	3	9	6
Job Security	4	2	2
Interesting Work	6	5	1

# Leaders counteract the common causes of demotivation.



- ❑ ***A cold, spiritless work environment***
- ❑ ***A toxic, dysfunctional work environment***
- ❑ ***Lack of opportunity for growth***
- ❑ ***Lack of individual recognition***
- ❑ ***Having to pull the load for slackers***
- ❑ ***Lack of concern for one's personal problems***

# **Leaders work hard to satisfy people's Emotional Needs.**



**Need for Self-Actualization**  
**Need for Esteem**  
**Need for Belonging**  
**Need for Security**  
**Need for Creature Comfort**

**Maslow's Hierarchy of Needs**

# Leadership Role #4: The Coach



# Leaders are coaches who conduct multiple Coaching Conversations.

## About the Past

Facts Opinions  
Comparisons Analyses



## About the desired future

Dreams Predictions  
Forecasts Declarations



## About the present

Instructions Requests  
Action Plans Promises



# Leaders give Reinforcing Feedback with a “You” Message.



## Praise

**Give overall praise**

*You did a fine job on...*

## Facts

**State specifically what went well**

*You ... And you ... And you ...*

## Results

**Describe the positive impact**

*Because of your fine work ...*

# Leaders provide Corrective Feedback Tactfully with an “I” Message

- **Facts.**        *I saw ....*
- **Findings**    *I believe...*
- **Feels**        *I felt ...*
- **Fix**            *I'd like to see ..*

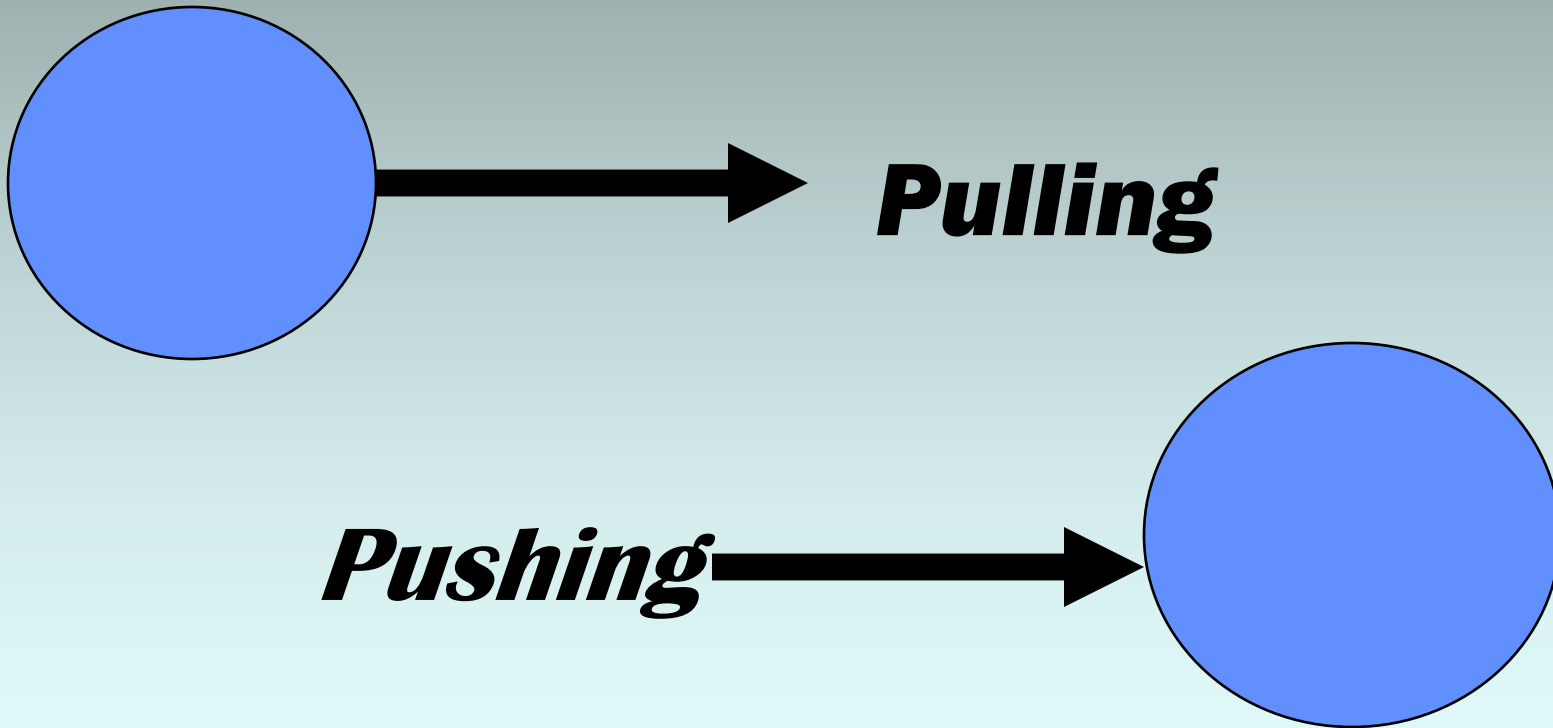
# Example of an “I” Message

- *I saw the quarterly report hasn't been submitted although it was due yesterday.*
- *I believe there was enough time to complete it.*
- *I am feeling frustrated because I have stressed punctuality so much.*
- *I need to see more effort devoted to completing projects on time.*

# **Leadership Role #5: The Change Agent**



**Leaders are change agents who  
use Pulling and Pushing  
Strategies to influence others.**



# How to Keep Growing

- Become a student of leadership
- Volunteer to lead
- Learn from your experiences
- Get feedback on how you did
- Find a mentor
- Get help from your boss
- Create a Self-Development Plan

