Better Performance through Better Project Management

ACEC Indiana – Engineering Leadership Program

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Traits of the Best Project Manager You Know?

Traits of the Best PMs

as Defined by a Major Client

1. Follows through
   - On his/her commitments
   - On others' commitments
2. Good listener
3. Proactive
4. On top of every aspect of the job
5. Leads by example
6. Good communicator
7. Backs decisions of team members
8. Organized
9. Handles multiple priorities well
10. Technically proficient
11. Holds people accountable
12. Delegates well

The Most Successful PMs

Strong Project Manager	Project Administrator
❑Manages the proposal effort	❑Little involvement in marketing
❑Prepares the fee budget	❑Gets fee budgets from others
❑Participates in fee negotiation	❑Accepts whatever is negotiated
❑Participates in team selection	❑Relies on dept. heads for staffing
❑Gets non-performers removed	❑Blames dept. heads for poor performers
❑Controls technical direction	❑Delegates tech. matters to dept. heads
❑Controls budget & schedule	❑Monitors budget & schedule
❑Maintains rapport with client	❑Reports status to client
❑Directs fee collection efforts	❑Lets accounting handle collections
❑Accountable for success or failure	❑Keeps records of who is responsible

How Principals Work with Strong PMs

Issue	Project Manager	Principal
Fee Proposals	Prepares	Approves
Fee Negotiation	Participates	Directs
Team Selection	Requests	Assigns
Removing Non-Performers	Recommends	Approves
Technical Decisions	Controls	Recommends
Client Relations	Maintains	Oversees
Future Work	Secures	Approves
Accountability	Maintains	Rewards

Roles of the Project Manager

Traditional Roles

1. Planning
2. Organizing
3. Directing
4. Controlling
5. Technical

Marketing Roles

1. Expand the Scope of Work
2. Get the Client Back
3. Actively Secure Referrals
4. Close the Deal
5. Sell <u>All</u> Your Firm's Services
6. Passive Marketing/Client Touches
7. IFBP

Financial Roles

8. Earn <u>the</u> Profit
9. Bill the Client
10. Secure Payment

Project Manager Sins

4. Letting the job get into trouble

3. Not knowing it’s in trouble

2. Knowing it’s in trouble and not asking for help

1. Hiding the fact that it’s in trouble

Levels of PM Organizational Maturity

1. Principals perform (and manage) all projects
2. Principals manage all projects; non-principals do the work
3. Non-principals manage small projects and/or tasks on large projects
4. Principals designate PMs (often called "Associates") who perform some PM duties
5. Principals turn over all PM duties to PMs
6. Principals develop a team approach with PMs
7. PMs become a principal-level position

PSMJ's Top 20 Excuses for Project Failure

1. The project team was full of incompetents.
2. I didn't have enough time.
3. The client kept making changes.
4. The budget was unrealistic.
5. I couldn't get enough help.
6. Working for that client is impossible!
7. I couldn't get the information I needed from accounting.
8. The schedule was unrealistic.
9. Everyone kept charging to the job.
10. _____ was taken off the job at the worst possible time.
11. I wasn't given enough authority.
12. The designers wouldn't stop designing.
13. The contractor didn't understand the job.
14. This job was unique.
15. The building department is full of idiots.
16. Principals kept charging to the job.
17. The subs would not cooperate.

18 The word processing people kept getting pulled off my job.

19. _________ quit and left me holding the bag.
20. The CADD operators didn't know what they were doing.

Leadership vs. Management: What is the Difference?

Leadership is Transformational

…creating new possibilities

Management is Transactional

…day to day activities

Leaders vs. Managers

1. The Leader
   - Does the right things
   - Creates a better system
   - Motivates people
   - Focuses on achieving the vision
   - Looks for long-term effectiveness

1. The Manager
   - Does things right
   - Improves the system
   - Directs peoples' activities
   - Focuses on the job at hand
   - Looks for short-term achievements

Attributes of a Leader

1. Vision
2. Focus
3. Ethical
4. Flexibility

1. Optimism
2. Energy
3. Courage
4. Team builder

Mistaken Leadership Attributes

1. Loyalty

1. Hard worker

2. Popular with clients

3. Good designer

Ten Commandments of Leadership

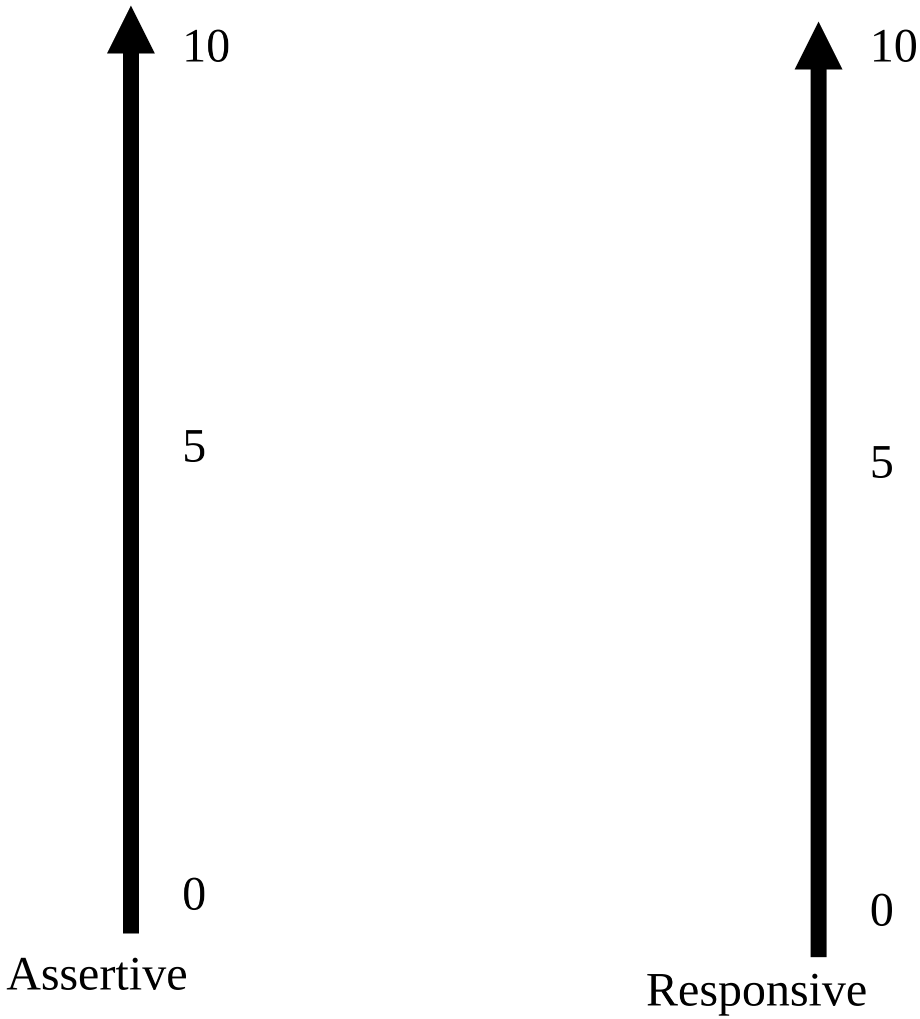
1. Treat everyone with respect
2. Set an example for others to follow
3. Be an active coach
4. Insist on excellence and accountability
5. Maintain high standards of integrity

1. Build group pride
2. Show confidence in your people
3. Maintain a sense of urgency
4. Be available and visible
5. Continually develop your own skills

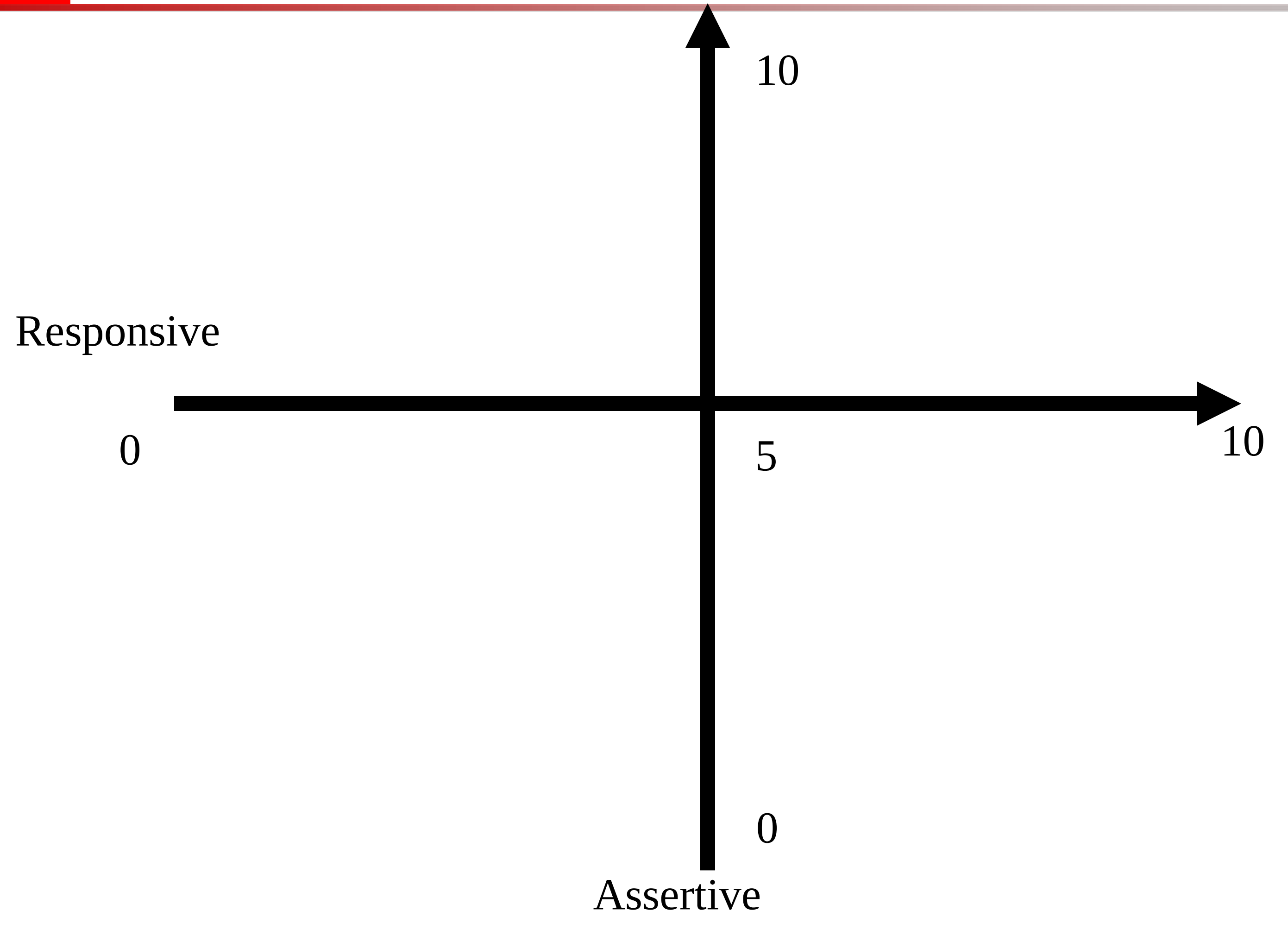
Leadership Development Action Plan

1. Walk the Talk – visibly demonstrate the Ten Commandments of Leadership
2. Mentor, mentor, mentor – senior management needs personal responsibility to develop new leaders
3. Accountability – make the Ten Commandments of Leadership part of your performance appraisals
4. Culture – reward leadership first

Personality Traits



Personality Traits



Personality Traits

Driver (Control Taker)

Pushy
Severe
Tough Minded
Dominating
Harsh
Determined
Requiring
Thorough
Decisive
Efficient

Expressive (Emotional)

Manipulative
Excitable
Undisciplined
Reacting
Promotional
Personable
Stimulating
Enthusiastic
Dramatic
Gregarious

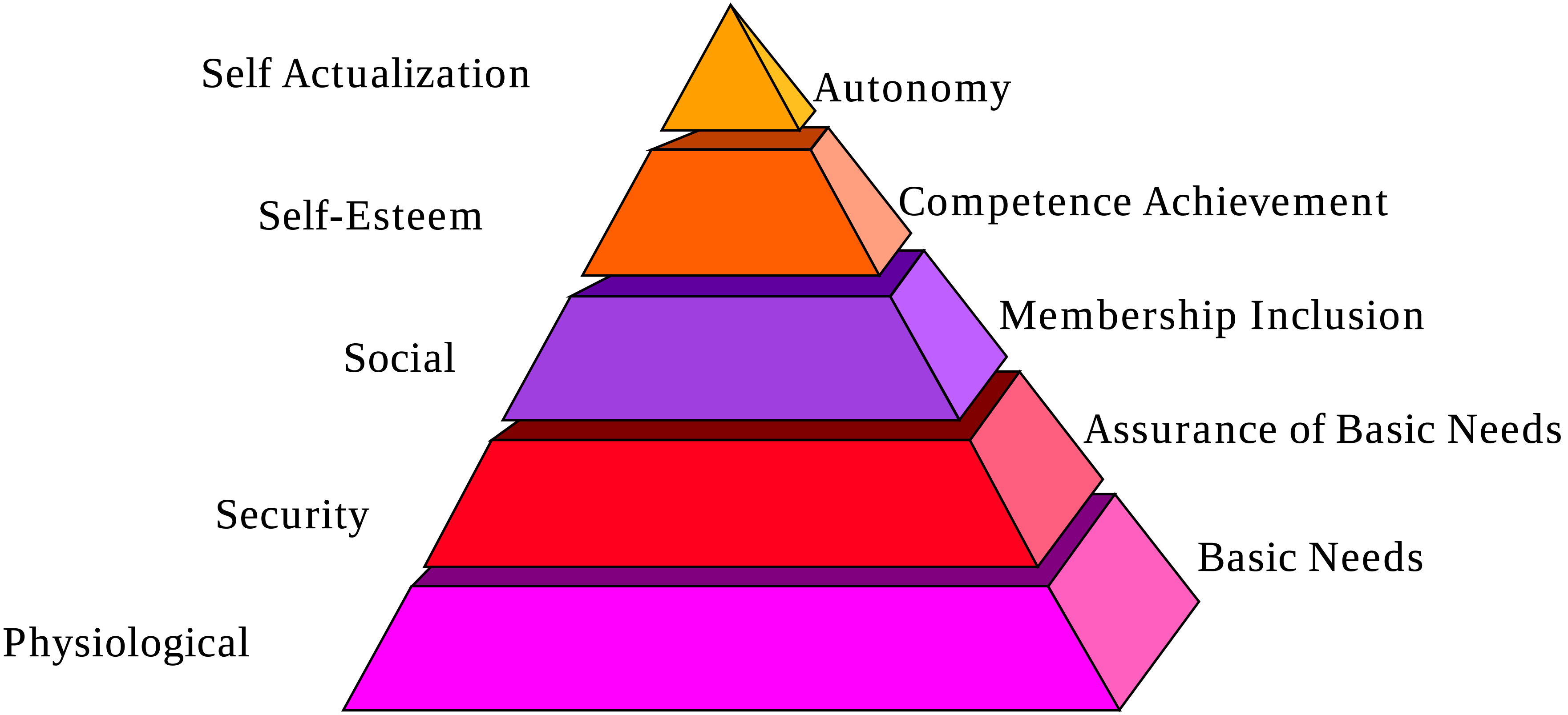
Analytic (Data Collector)

Critical
Indecisive
Stuffy
Exacting
Moralistic
Industrious
Persistent
Serious
Vigilant
Orderly

Amiable (Friendly)

Conforming
Retiring
Pliable
Dependent
Awkward
Supportive
Respectful
Willing
Dependable
Agreeable

Maslow's Hierarchy



Job vs. Career Personnel

Motivational Factors

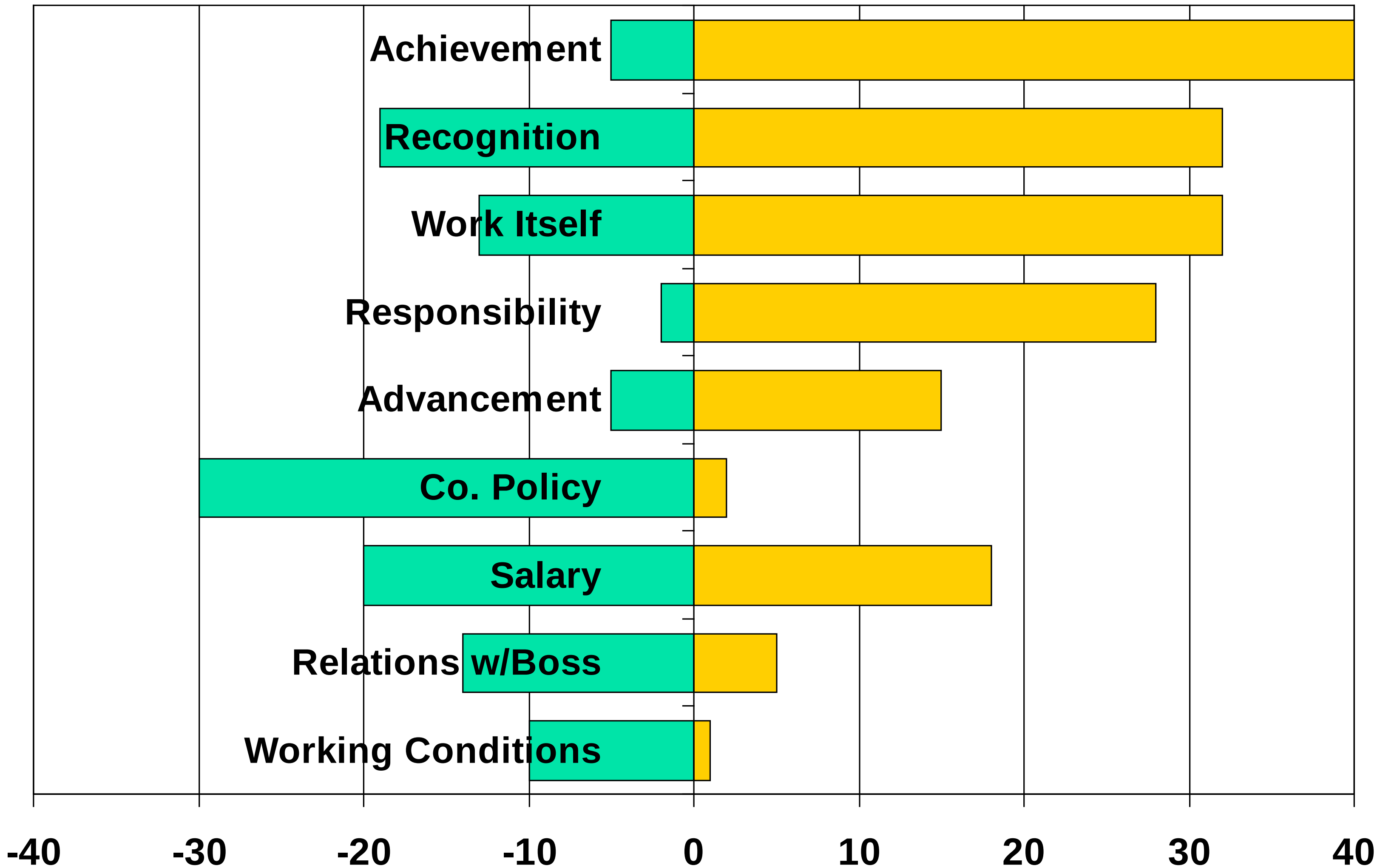
1. Challenge
2. Responsibility
3. Professional Advancement
4. Personal Development

Hygiene Factors

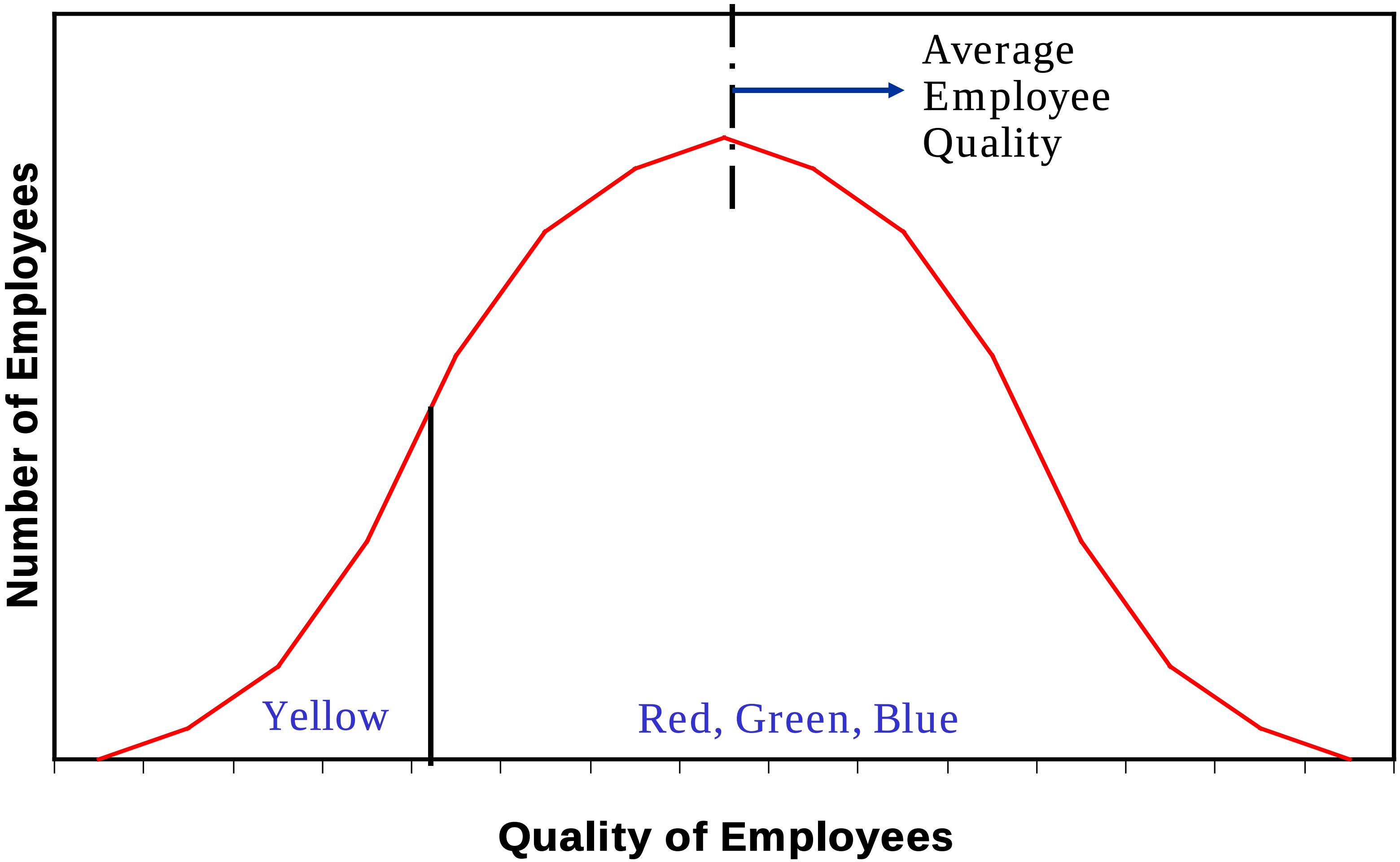
1. Money
2. Fringe Benefits
3. Office Space
4. Titles

Herzberg's Motivation Factors

(percent satisfiers-engineers)



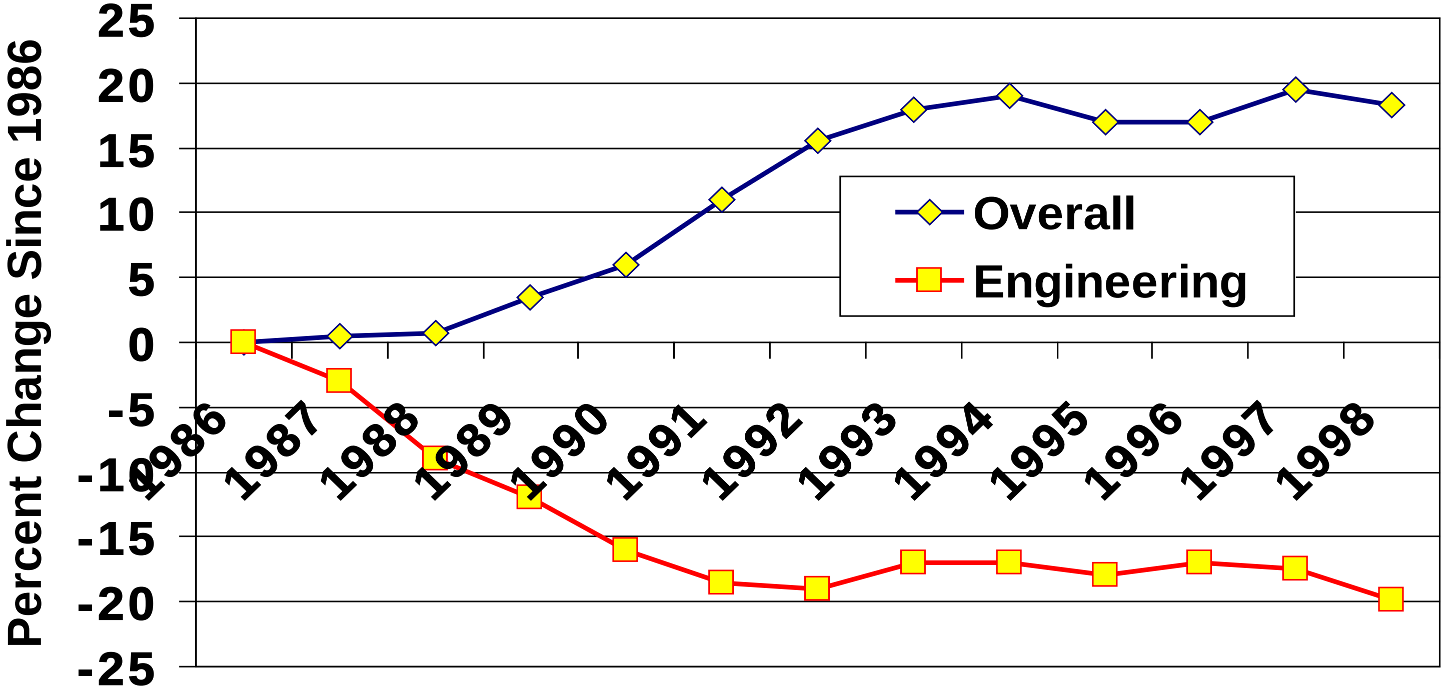
Improving Employee Quality



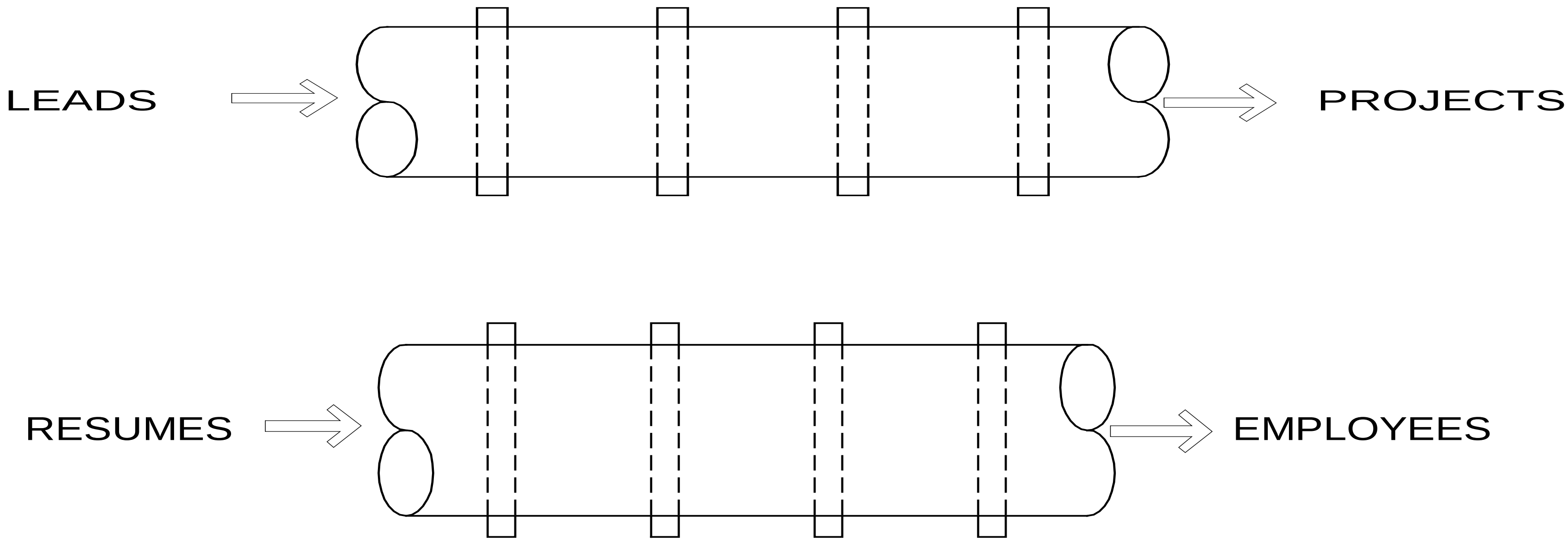
Where Have All the People Gone?

Bachelors Degrees Since 1986

(Source: Engineering Workforce Commission)



Working the Pipelines



Who Do You Want to Hire?

1. Team Players
2. Technical and Business Savvy
3. Oral and Written Communications Skill
4. Experience vs “The Right Stuff”

Pruning the Bushes

1. Let everyone know your HR management philosophy.

2. View temporary slowdowns as opportunities.

3. Once you have decided to amputate your hand, don't do it one finger at a time.

4. Treat departing employees with respect.

Costs & Benefits of Employee Turnover

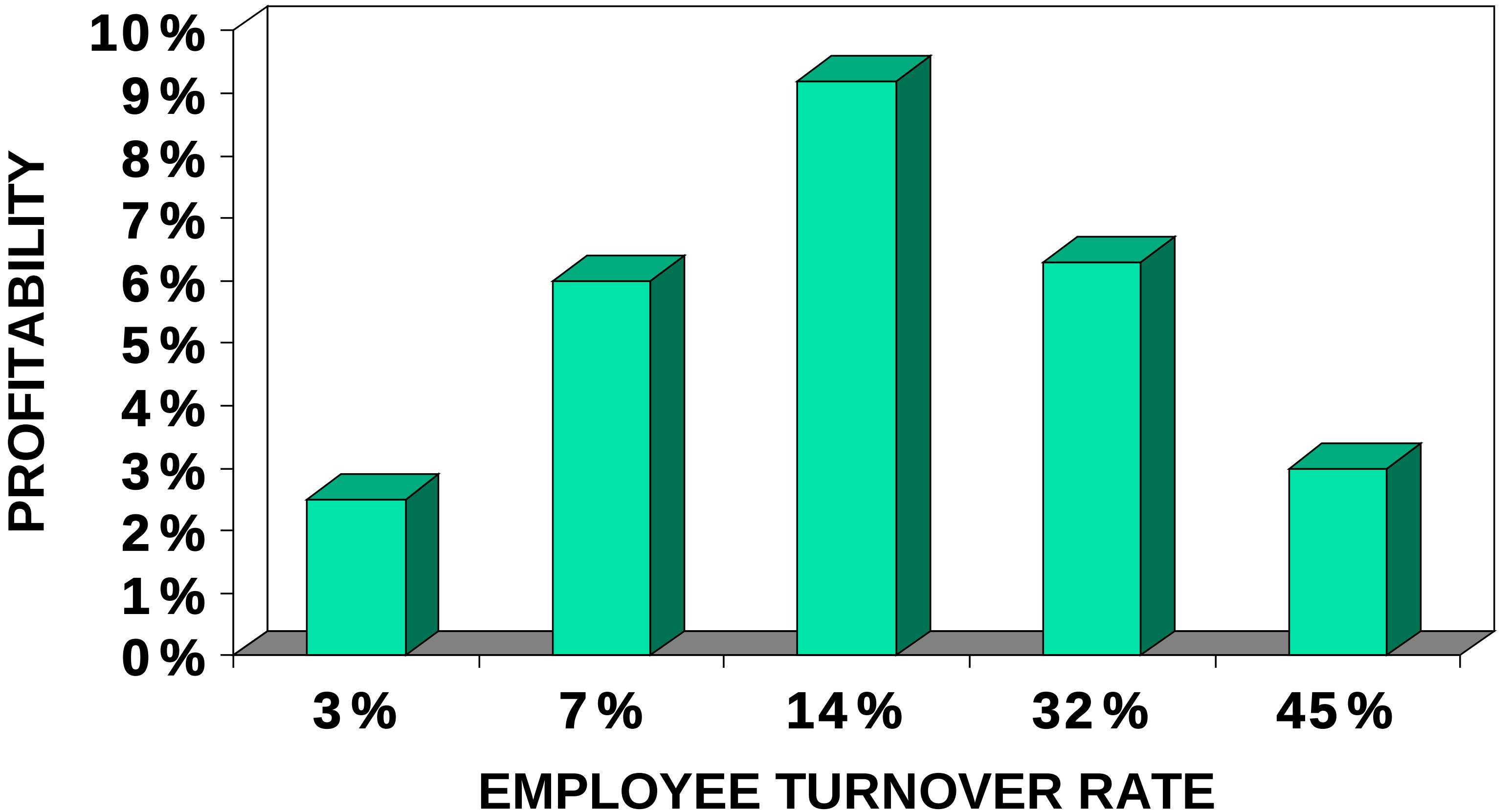
Costs -- $10,000 - $20,000 per exempt employee

1. Training cost for replacement
2. Lost productivity (learning curve)
3. Lost capability
4. Impact on client relations
5. Disruption during transition to new employee
6. Impact on employee morale

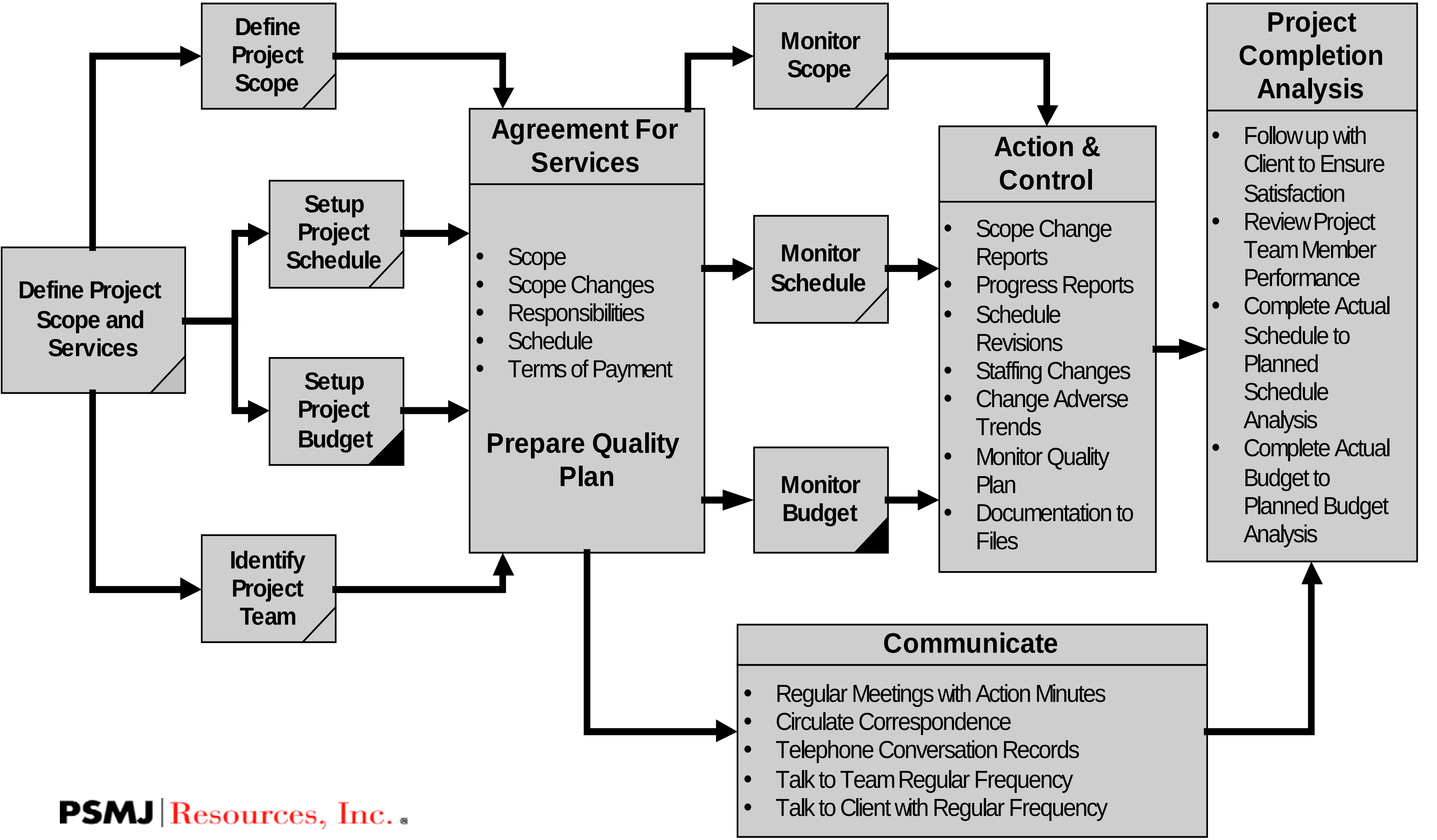
Benefits -- Non-quantifiable, but significant

1. Elimination of marginal performers
2. Reduces "salary creep"
3. Increases advancement opportunities for younger staff
4. Infusion of new talents, approaches, ideas

Employee Turnover Rate vs. Profitability



Project Management Flow Diagram



Planning the Project

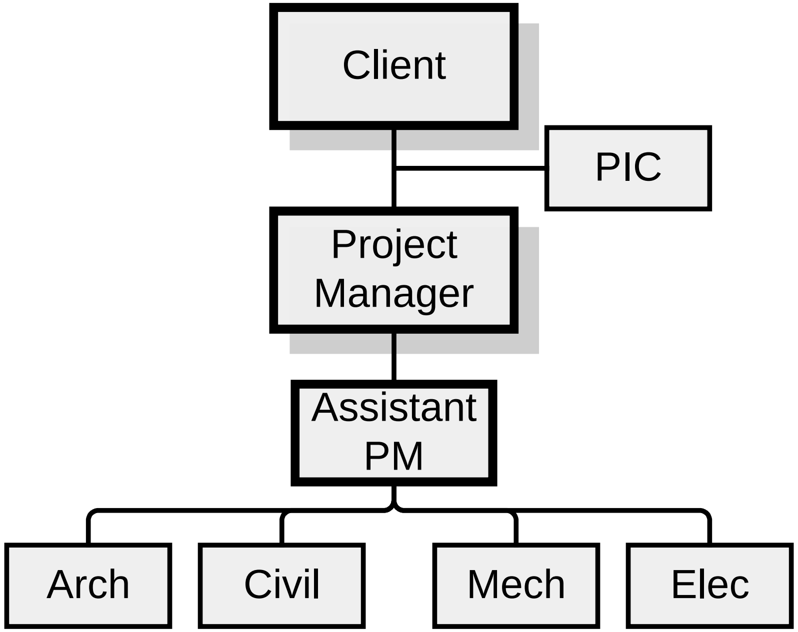
1. When Should You Begin to Plan?
2. The Objectives of Planning
3. Goals vs. Tasks vs. Priorities
4. Elements of a Project Management Plan (PMP)
5. Crisis Prevention/Risk Management

Elements of a Project Mgmt Plan

1. Goals & Objectives
2. Scope
3. Schedule
4. Financial Plan
5. Team Organization, Resources, Responsibilities
6. Quality Control Process
7. Change Management Process
8. Communication Plan
9. Contingency/Risk Management Plan

The Assistant Project Manager

1. Official or Unofficial?
2. Performs specific PM tasks
3. Pinch hits during PM's absence
4. Allows PM to handle more jobs
5. Accelerates development of new PMs
   - Build a relationship with a targeted client contact
   - Suggest a value added idea at a client meeting
   - Attend client meetings to observe dynamics
   - Prepare project close-out and lessons-learned



Why Are We So Bad at Teamwork?

Why Teams Fail

1. No Clear Vision
2. Poor Team Behavior
3. Focus on Personalities
4. Lack of Feedback

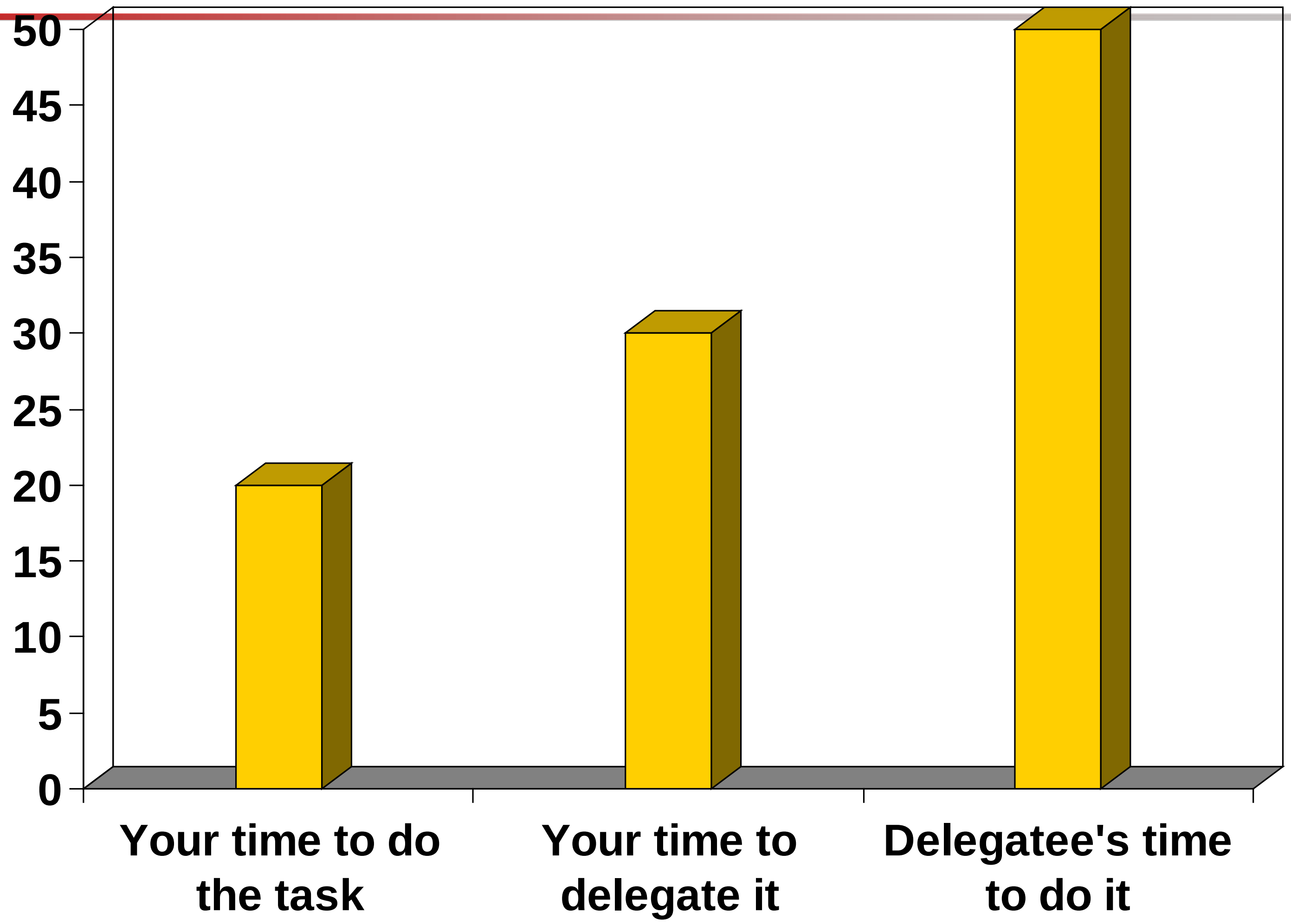
1. Lack of Team Purpose
2. Personal Agendas
3. Unwilling to Participate
4. Value Conflicts

Characteristics of Effective Teams

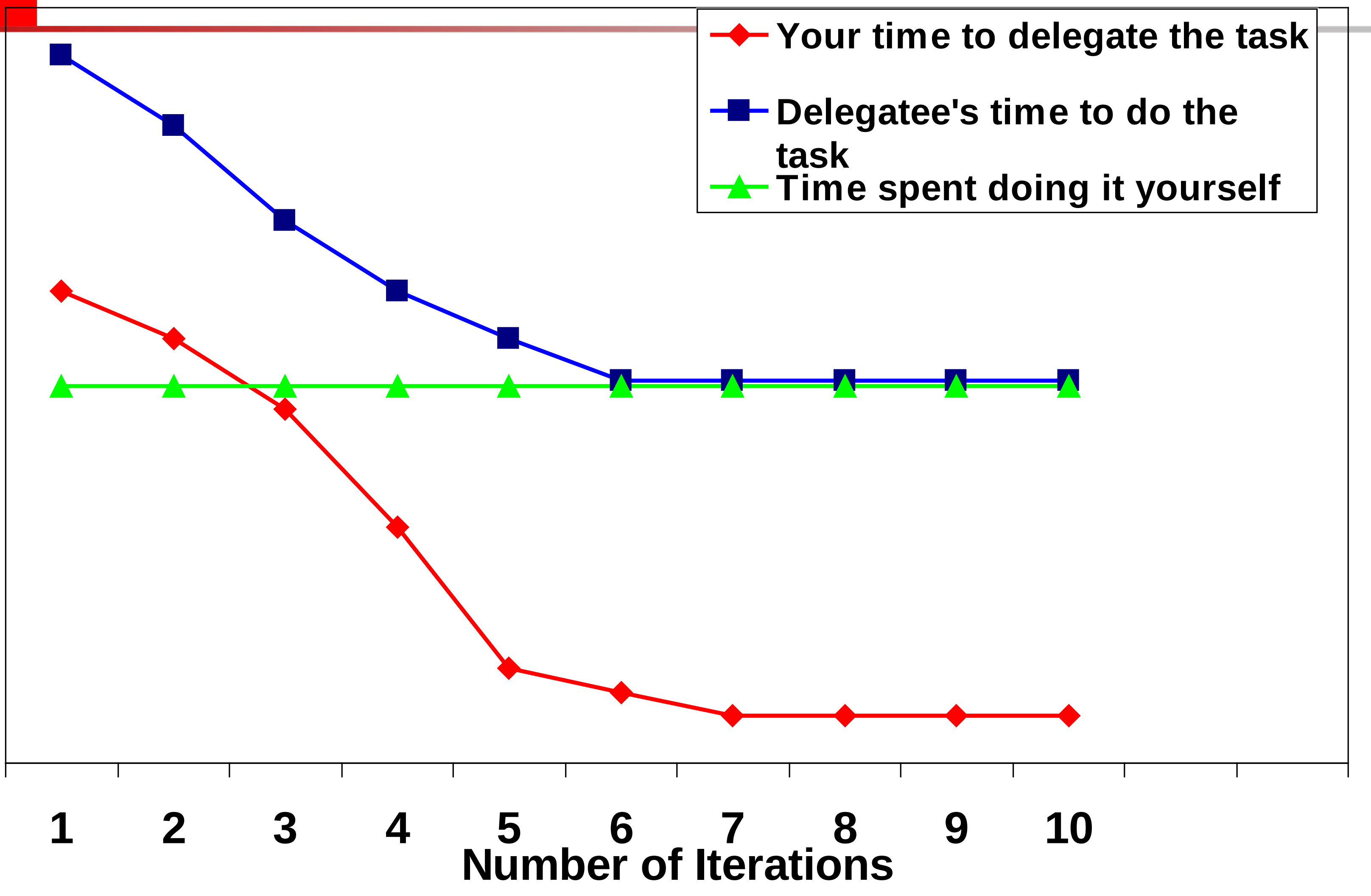
1. Collective AND Individual Accountability
2. "Atmosphere" is relaxed
3. Lots of discussion
4. Objective well understood
5. Members listen to each other

1. Most decisions by consensus
2. Constructive disagreements
3. Criticism is comfortable
4. Clear assignments made & accepted
5. Leadership shifts from time to time

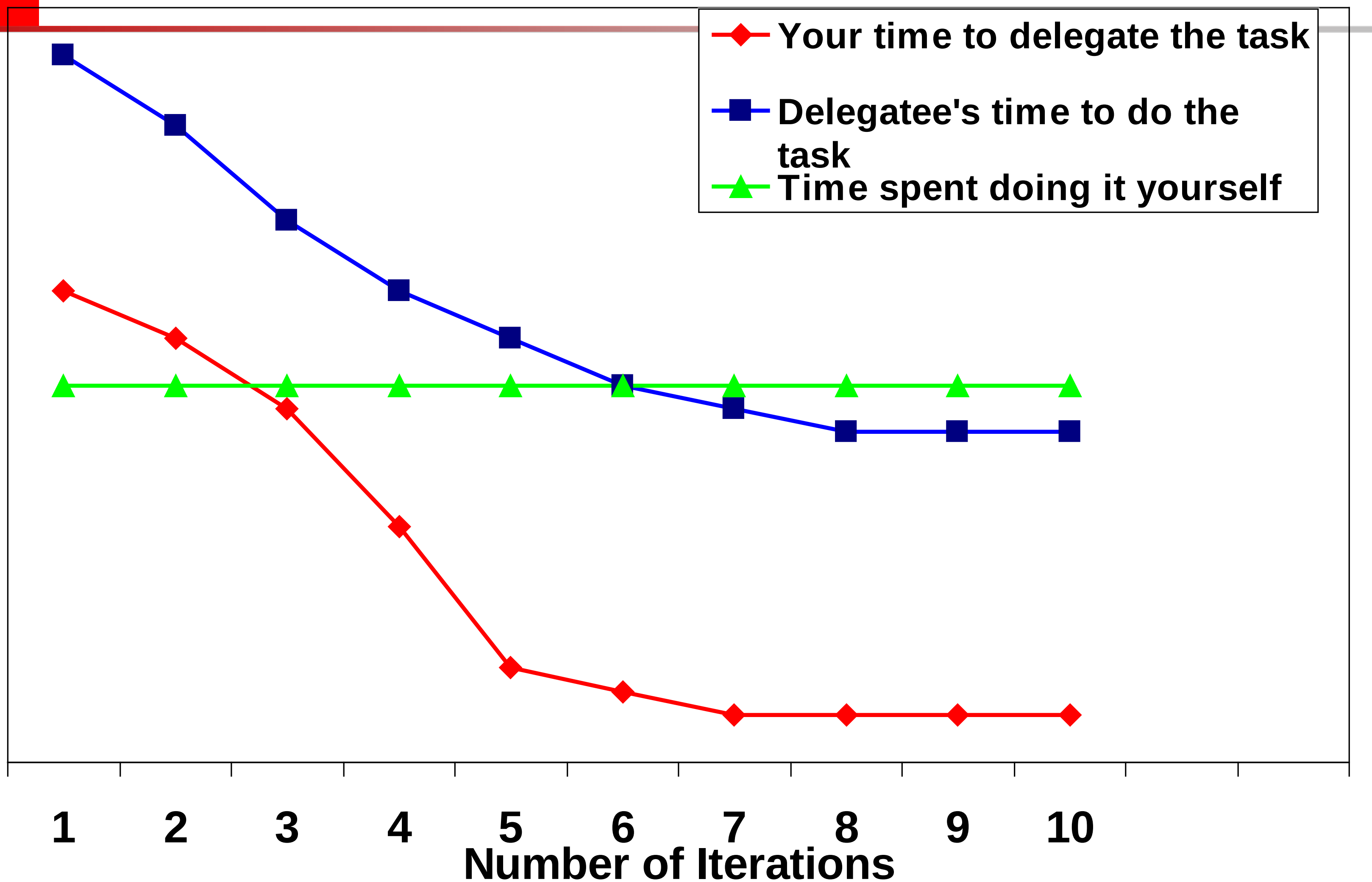
The "Static" View of Delegation



Delegation Aerobics



Delegation Aerobics



Ten Steps to Better Delegation

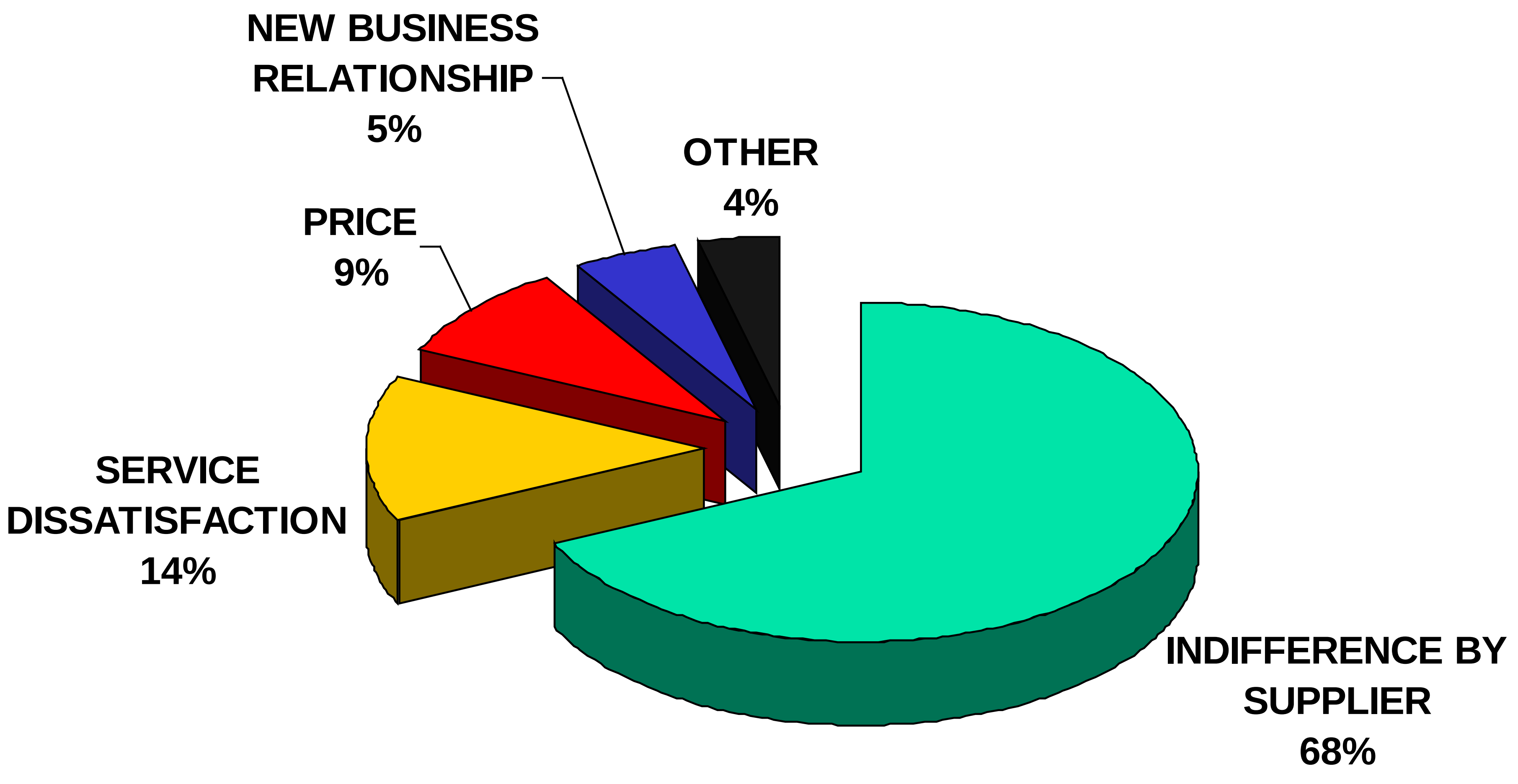
1. Select the right person
2. Provide all the available information
3. Ask what additional information is needed
4. Clearly define the product you expect
5. Agree on the proper approach
6. Agree on a completion date
7. Agree on a level of effort
8. Establish control mechanisms (MBWA & MBAQ)
9. Expect the product to be 30% different; 10% wrong
10. Give credit; take blame

What is a Good Consultant

When vendors, consultants, and contractors asked the President of Intel Corporation how they can get more work from the giant chip manufacturer, he told them:

"Go out and learn how to make chips. Then come back and help us do it better."

WHY DO CUSTOMERS DEFECT?



Battling “Indifference”

1. Managing your Client
2. Superior Client Service
3. Keeping Relationships Fresh
4. Proactive Communication

Passive Marketing/Touching Clients

1. Forward an article about a client's business
2. Forward info on new legislation affecting them
3. Send a book about strategies in their business
4. All phone calls equal one touch

1. Send clippings on other projects or industry trends
2. Send a handy tool or checklist that makes their job easier
3. Thank you notes
4. Lunches & Breakfasts
5. Company Newsletters

The ________ Rule

Annual Revenue Generation

Repeat clients = ____%

New clients = ____%

Marketing Budget Consumption

Repeat clients = ____%

New clients = ____%

Critical Success Factors in Managing Your Client

Leadership

1. Know your client
2. Understand your client's business
3. Be an equal partner
4. Foster trust
5. Demonstrate credibility
6. Anticipate – Don't React

Management

1. Maintain focus
2. Be responsive
3. Meet commitments
4. Communicate effectively
5. Be prepared
6. Be persistent when you need input

No Surprises!!!!!!

How Well Do You Know Your Client?

1. Who does your client report to?
2. Why are they organized the way they are?
3. What are their strategic drivers?
4. Where do the decision makers sit?
5. What do they value and expect in their relationship with you?
6. What do they read?
7. What is their career path?
8. What are their outside interests?
9. What hassles can you remove from their life?

How Satisfied Are Your Clients?

1. Solicit feedback (1 page surveys)

2. Send clients a piece of paper marked " How Can We Do Better?" (Include the pen and postage paid envelope)

3. Ask clients to keep a sheet entitled "Things Consultants Do That Bug Me"

4. Collect, Summarize, Share, Do It Again!!!!!

Keeping Clients Happy = Keeping Clients

The 5 ***Be's*** to Superior Client Service

1. ***Be Accessible:*** easy to be contacted

2. ***Be Responsive:*** adapt to client needs

3. ***Be a Closer:*** do what you say you will do

4. ***Be Quick to Correct:*** bad news doesn't get better with age

5. ***Be Passionate:*** it's contagious

Presenting Bad News – Spin Control

1. Get bad news out as early as possible
2. Make sure clients hear it from you first
3. Take responsibility immediately
4. Present alternatives
5. “Your first loss is your last loss”

Seven Steps to Managing a Crisis

1. Don’t react immediately - THINK
2. Define the problem (not just the symptoms)
3. Identify <u>all</u> the alternatives
4. Don’t assess blame
5. Select the alternative(s) <u>you</u> believe will work
6. Take positive, authoritative action
7. When the dust settles, assess the results

Managing Change

1. Define the change management process as part of the PMP
2. Always embrace client change with great enthusiasm
3. ***DO NOT*** avoid the discussion on impacts to scope, schedule or budget
4. Present the consequences of the change
   - Let the client decide on implementation
5. Define Freeze-Milestones and Client-Decision Matrix

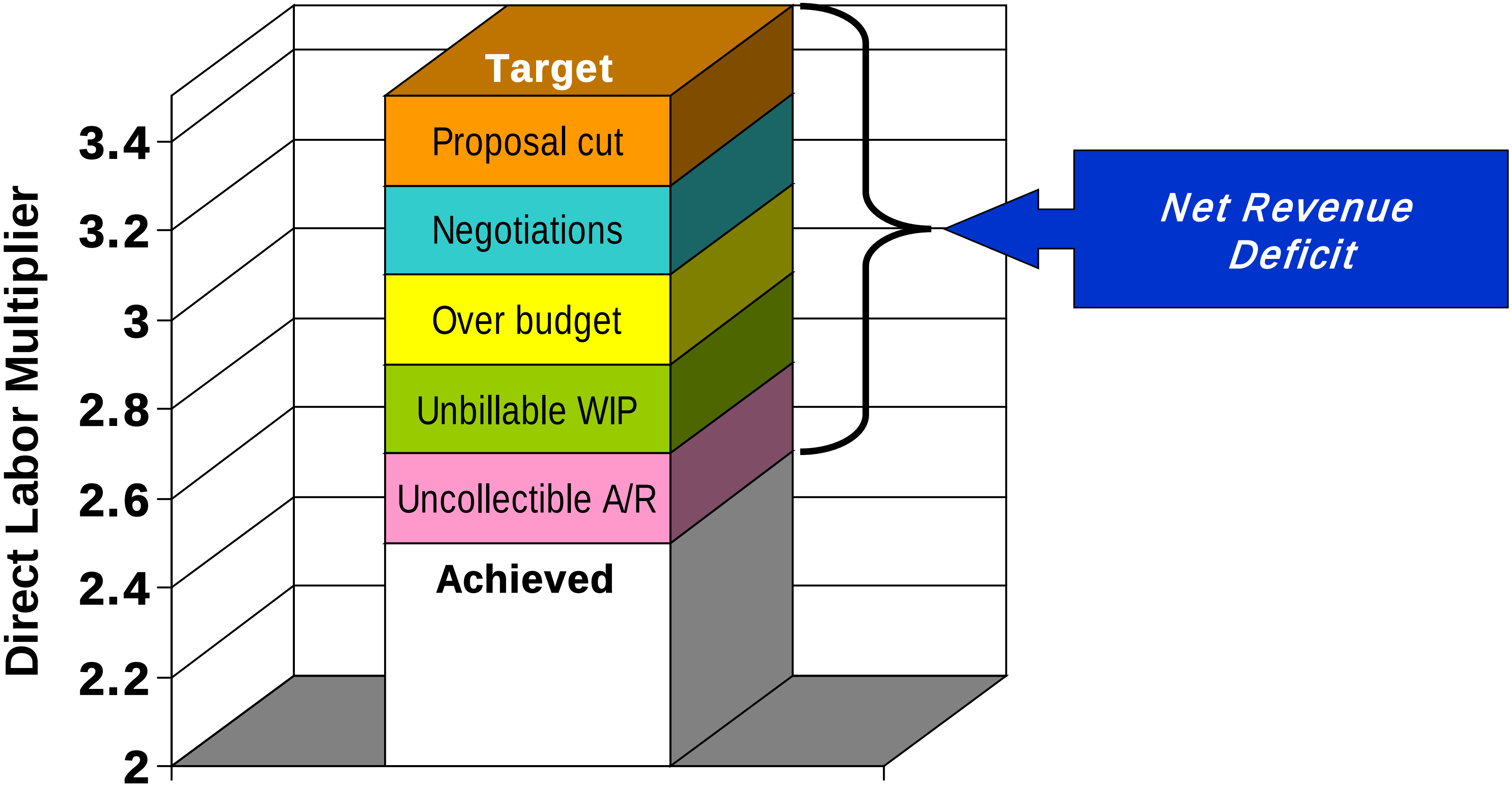
Going to the Client for More Money

1. Plan early.
2. Establish the change order procedure up front.
3. Get **immediate** concurrence from the client of changes.
4. Keep good documentation.
5. Limit small changes (aka, scope creep).
6. **Never** agree to do extra work without authorization.
7. When in doubt, ask for the money!

Building a Strong Project Management Structure

1. Diagnose the problems (PM audit)
4. Conduct regular project reviews
3. Train your PMs
2. Install a foundation based on earned value tracking

What is “Net Revenue Deficit”?

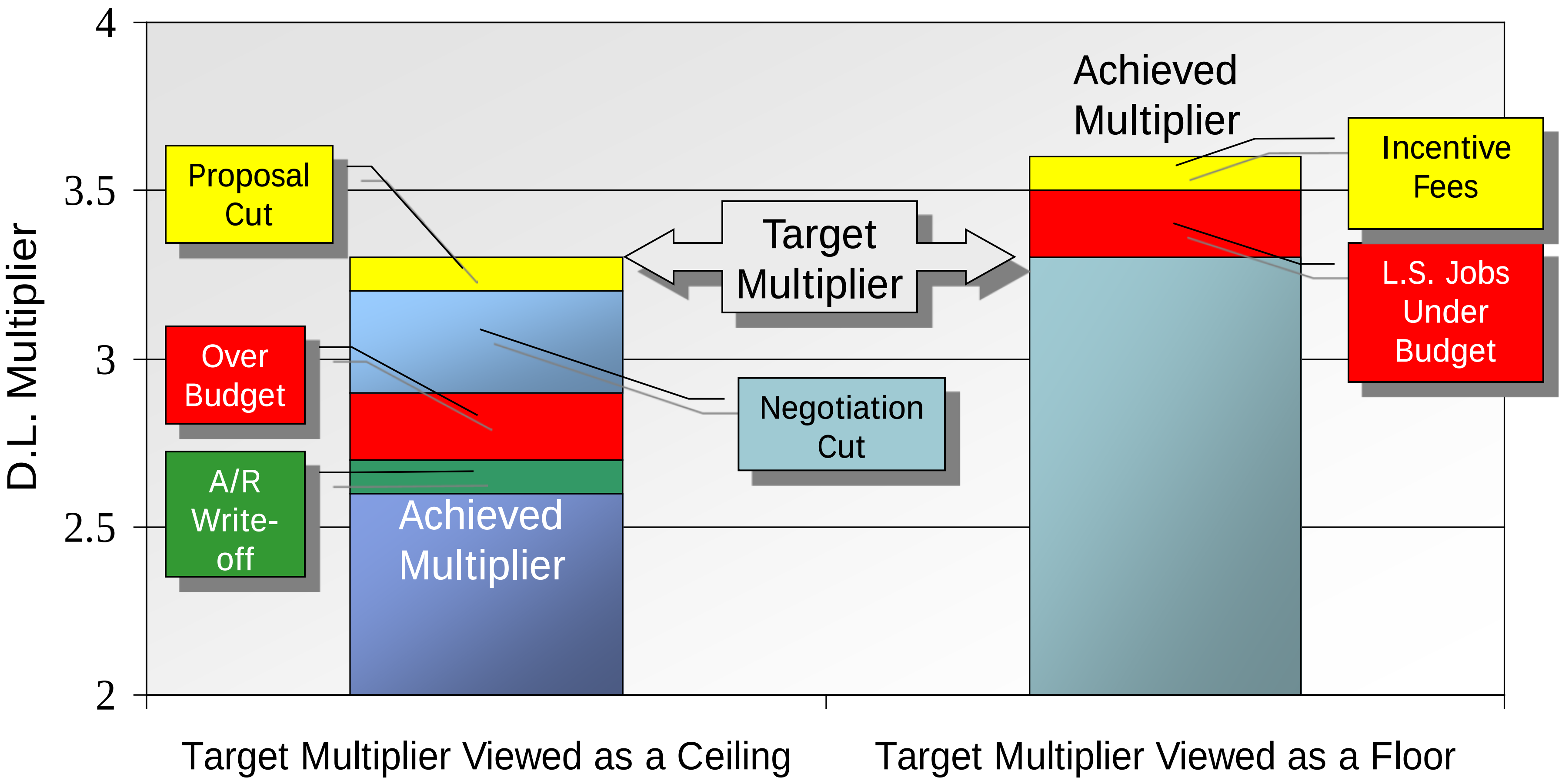


What Causes "Net Revenue Deficits"?

$$\text{NRD} = \frac{\Sigma\,(\text{Project Write-downs} - \text{Project Write-ups})}{\text{Annual Net Revenue}}$$

1. Fee reductions
2. Jobs in budget trouble
3. Jobs with potential quality/liability problems
4. Charges to jobs w/o contracts
5. Delays in getting charges keyed into accounting
6. Delays in getting charges billed
7. Late payment
8. Jobs with unusually high risks

How Can You Generate a Net Revenue Surplus?



Method #1: Upward Budgeting

Proposed Fee
=
Contingency
+
Expenses (ODCs)
+
Profit
+
Total Cost
=
Overhead Rate
X
Direct Labor
=
Hourly Rate
X
Staff Hours

WBS (Task Outline)

Initial Goal

Billing Rates → (Profit + Total Cost = Overhead Rate X Direct Labor = Hourly Rate)

Method #2: Downward Budgeting

Achievable Fee

\-

Contingency

\-

Expenses (ODCs)

\-

Profit

=

Total Cost

÷

Overhead Rate

=

Direct Labor

÷

Hourly Rate

=

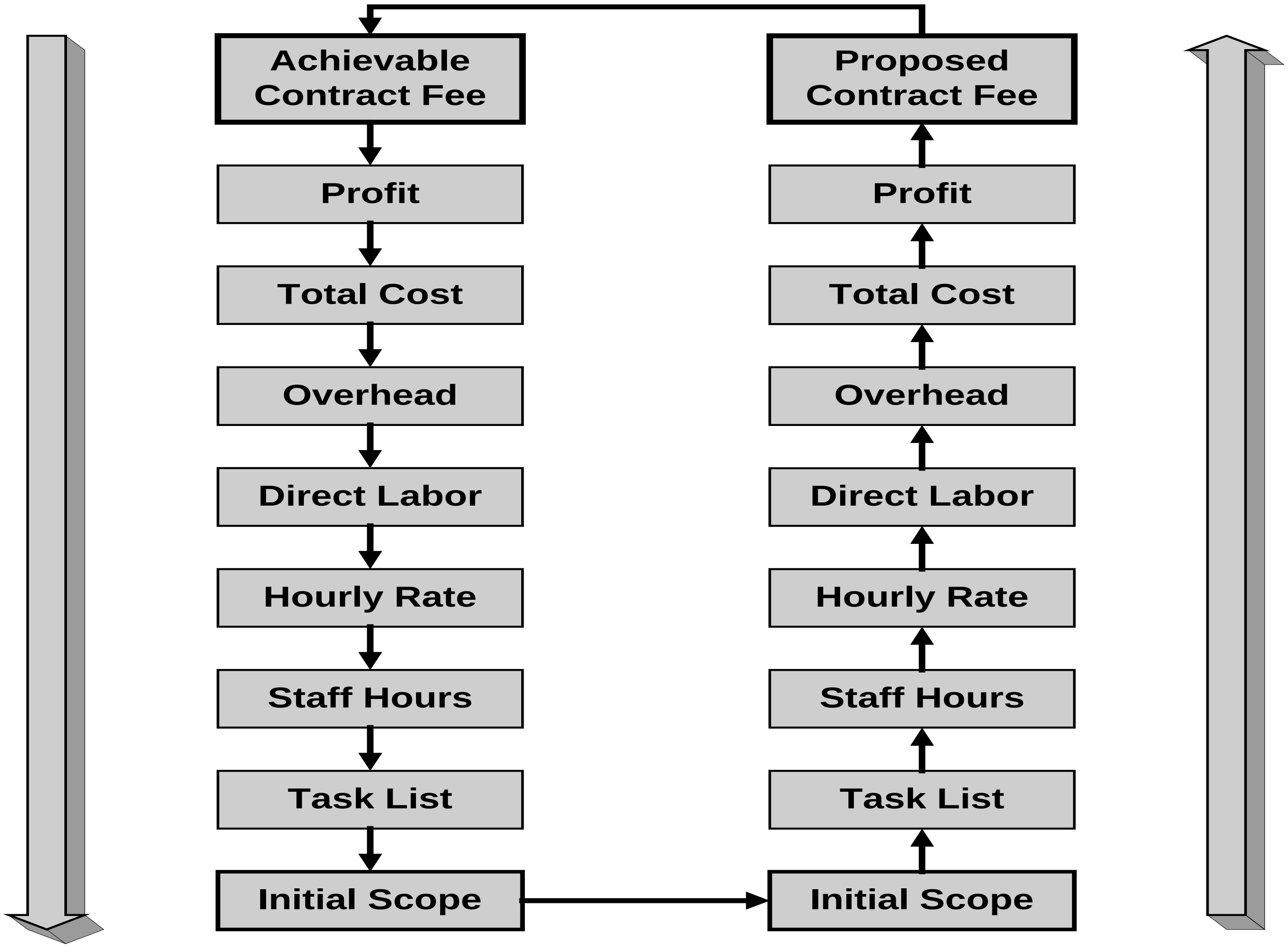
Staff Hours

WBS (Task Outline)

Initial Scope

Billing Rates

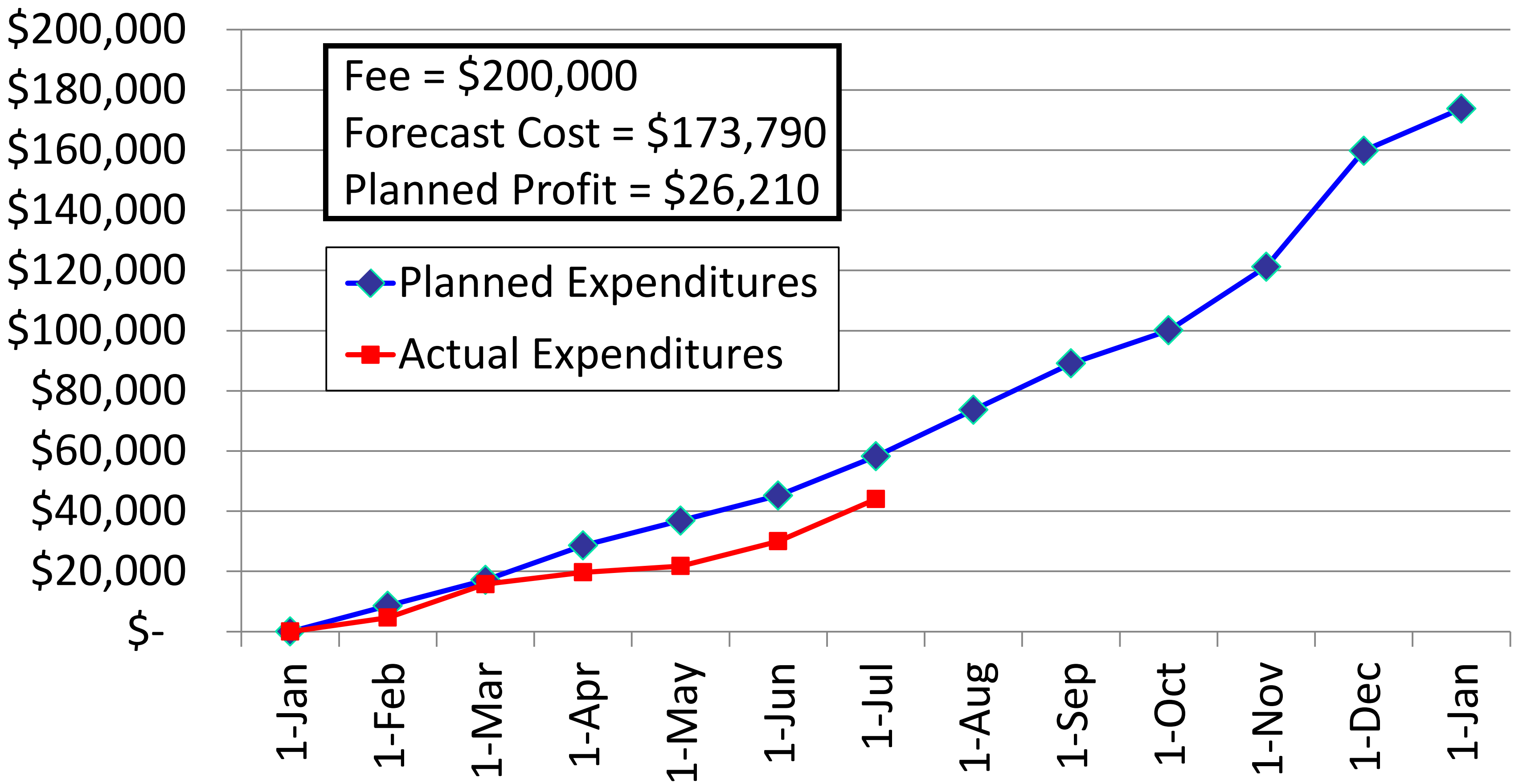
Budget Method #2a: Real World Budgeting



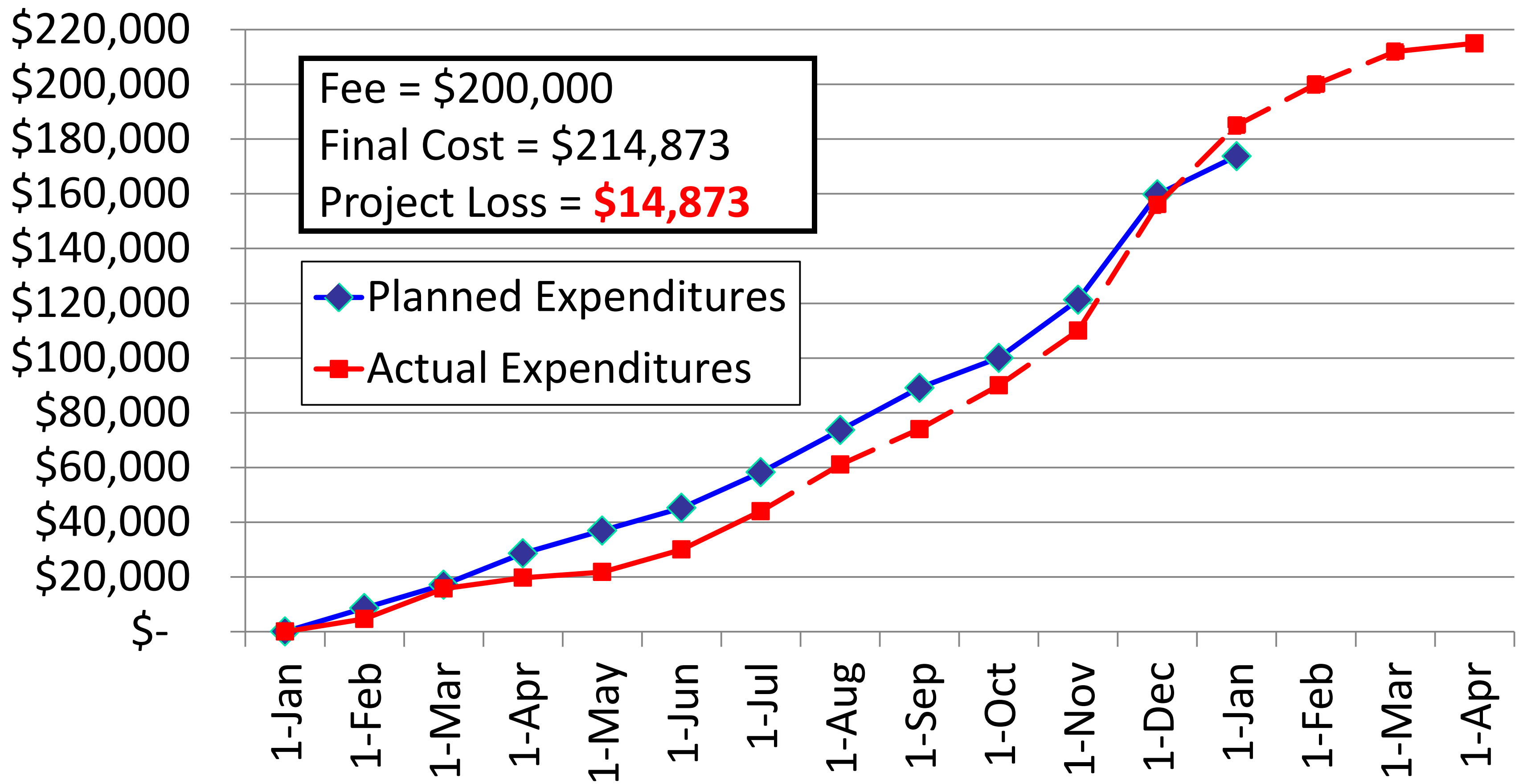
A Little Quiz

Your Project	*Present Status*	*What's the % Complete?*
$100,000 Budget	$40,000 Spent	☐ 30%
10-Month Schedule	6 Months Spent	☐ 40%
		☐ 50%
		☐ 60%
		☐ 70%

How Does This Project Look?



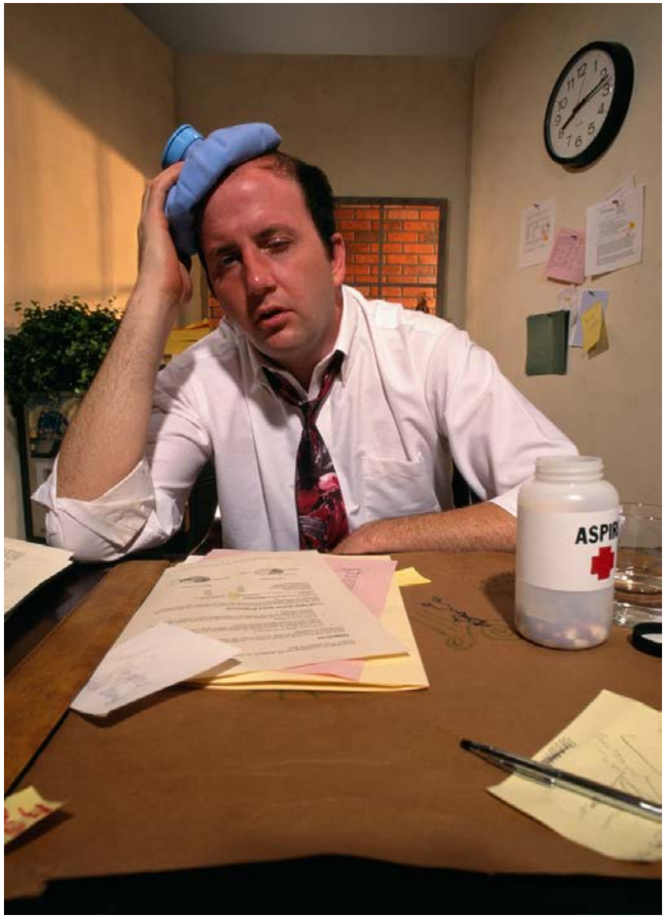
What Happened on the Way to the Bank?



You Can Avoid This Problem By Using the EAC Method

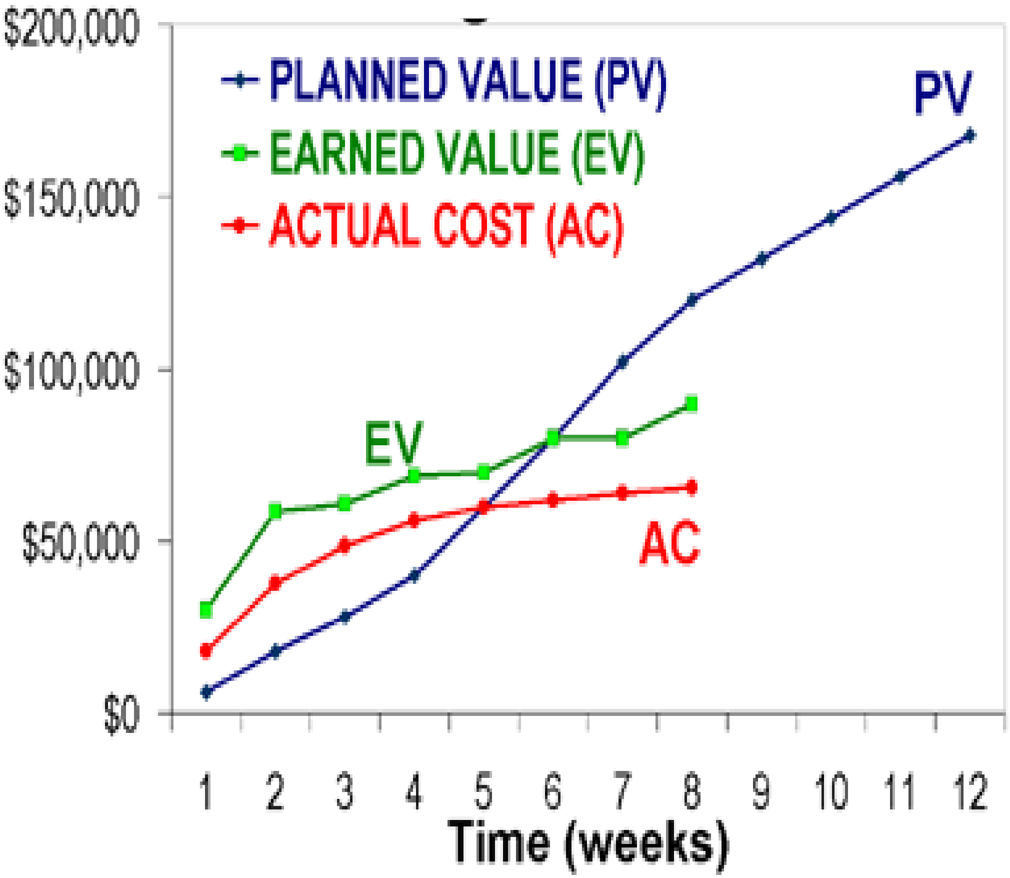
1. Take out separate accounting codes for each task/activity
2. To assess status, generate a forecast to complete (FTC) for each task/activity
3. Get actual expenditures from Accounting for each task/activity
4. Add Steps 2 and 3 to determine the Estimate at Completion (EAC)

Problems With the EAC Method



1. You need lots of job cost account numbers
2. Team members don't charge their time to correct account numbers
3. PM ends up being a "timesheet cop"
4. Team has to estimate forecast to complete each month

PSMJ's Simplified 4-Step EVA Method



1st line – Planned Value

1. Prepare an expenditure forecast
   - Convert expenditure forecast to a progress forecast
   - Change the baseline only if the contract is amended

2nd line – Earned Value

2. Estimate progress for each task
3. Compute overall progress

3rd line - Actual Costs

4. Actual expenditures from accounting

Project Status

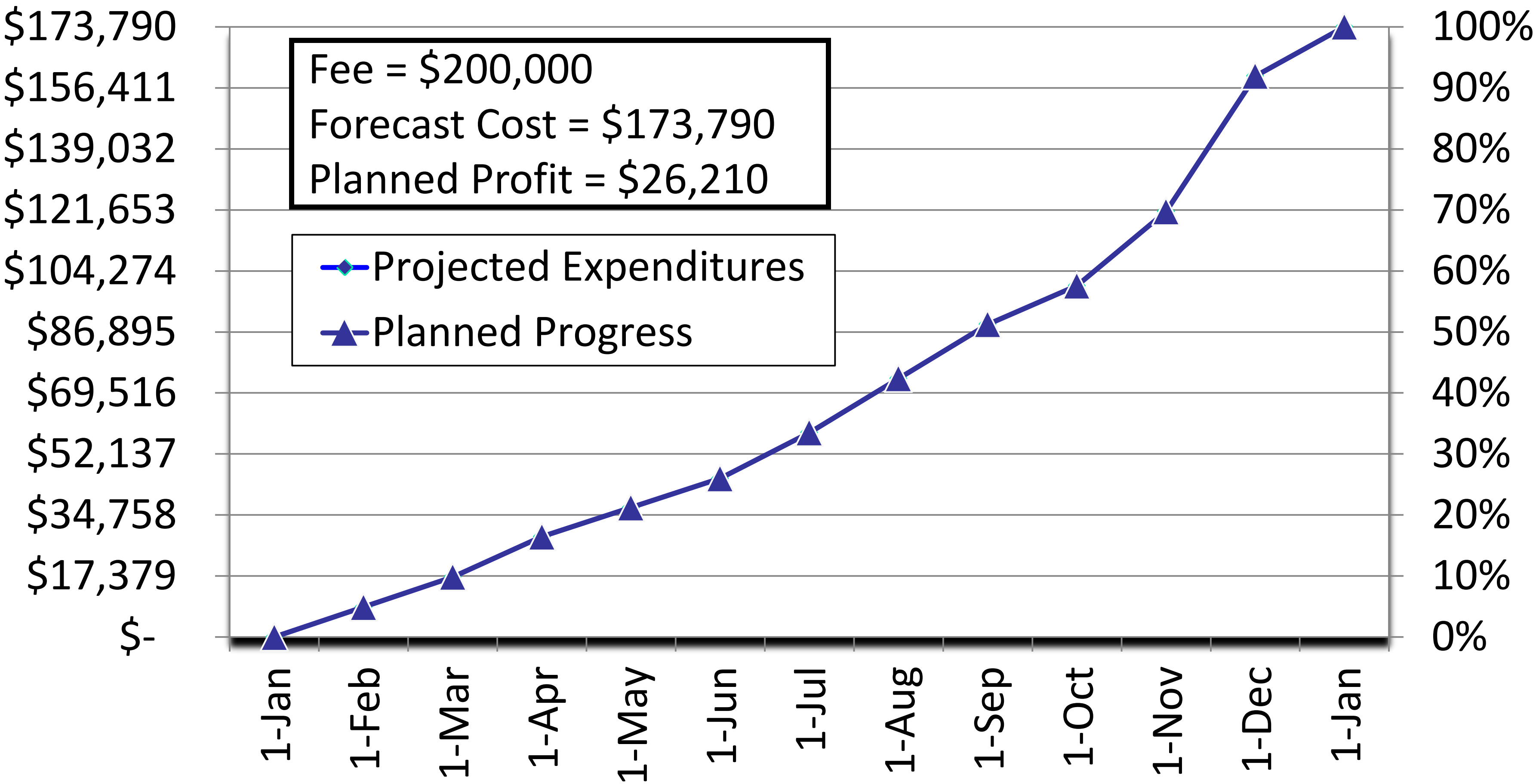
Schedule (Step 3 vs. Step 1)

Budget (Step 3 vs. Step 4)

Cost / Schedule Breakdown

Tasks	Budget	Start	Finish
A. Develop Background	30,390	1/1/2000	1/6/2000
B. Conduct Case Study	-		
1. Select Case Study Study	5,870	3/1/2000	5/15/2000
2. Prepare Breifing Documents	6,120	1/15/2000	5/15/2000
3. Develop Data Mgmt Plan	20,150	1/1/2000	3/30/2000
4. Visit Case Study Sites	54,200	4/1/2000	4/6/2000
5. Analyze Waste Samples	46,600	6/1/2000	12/31/2000
C. Evaluate Costs for Case Studies	-		
1. Develop Cost Models	16,310	1/1/2000	6/30/2000
2. Perform Preliminary Designs	28,110	6/1/2000	11/30/2000
3. Estimate Costs	24,320	7/1/2000	12/30/2000
D. Evaluate Potential for Trtmt	12,820	1/1/2000	12/31/2000
E. Assess Cost Impacts	17,260	11/1/2000	12/28/2000
F. Evaluate Cost Impact Models	19,290	11/1/2000	11/30/2000
G. Project Reporting	-		
1. Topical Reports	-		
a. Background Data	24,440	7/1/2000	8/30/2000
b. Case Study Site Visits	24,440	10/1/2000	11/30/2000
c. Waste Sampling	18,440	11/1/2000	12/15/2000
2. Draft Report	30,600	10/1/2000	11/30/2000
3. Final Report	19,190	11/1/2000	12/30/2000
H. Project Management	32,400	1/1/2000	12/31/2000

Projected Expenditures and Planned Progress

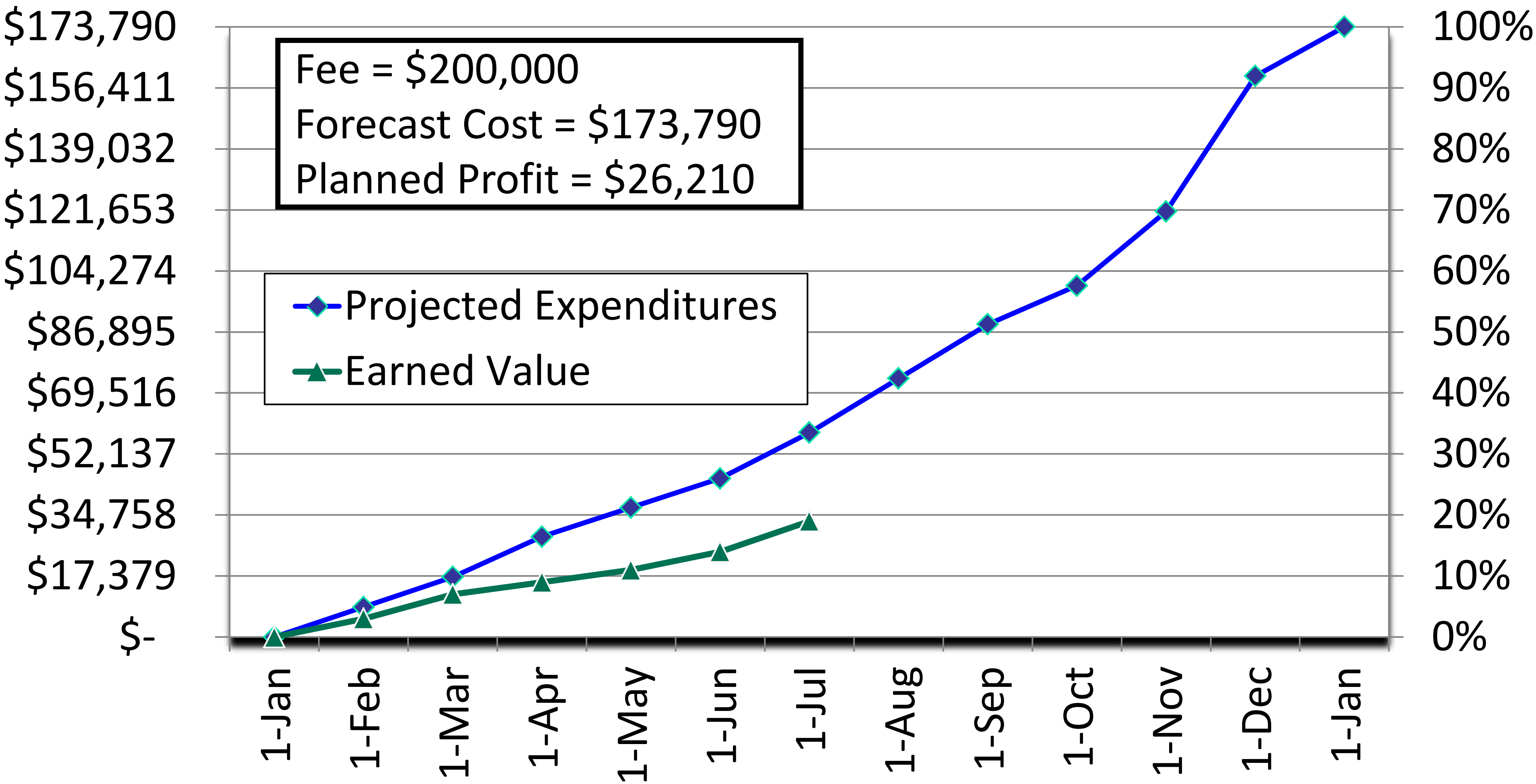


Earned Value Calculation

Current Date = July 1

Task Description			Task Budget		Percent Complete		Earned Value
A.	Develop Background Data		$13,140	x	65%	=	$8,541
B.	Conduct Case Studies						
	1.	Select Case Study Sites	2,920	x	100%	=	2,920
	2.	Prepare Briefing Documents	2,960	x	100%	=	2,960
	3.	Develop Data Management Plan	7,650	x	100%	=	7,650
	4.	Visit Case Study Sites	19,700	x	20%	=	3,940
	5.	Analyze Waste Samples	17,500	x	0%	=	0
C.	Evaluate Costs for Case Studies						
	1.	Develop Cost Models	8,060	x	10%	=	806
	2.	Perform Preliminary Designs	10,860	x	0%	=	0
	3.	Estimate Costs	8,820	x	0%	=	0
D.	Evaluate Potential for Treatment		4,420	x	30%	=	1.326
E.	Assess Cost Impacts		5,260	x	0%	=	0
F.	Evaluate Cost Impact Models		6,240	x	0%	=	0
G.	Project Reporting						
	1.	Topical Reports					
		a. Background Data	8,940	x	10%	=	894
		b. Case Study Site Visits	8,940	x	0%	=	0
		c. Waste Sampling	8,940	x	0%	=	0
	2.	Draft Report	18,100	x	0%	=	0
	3.	Final Report	7,940	x	0%	=	0
H.	Project Management		13,400	x	25%	=	3,350
	Totals		**$173,790**				**$32,387**

What is the Project Schedule Status?



Are Your PMs Drowning in Data?

One Firm's Accounting Reports to PMs

- Division Time Analysis
- Percent Chargeable
- Detail Verification
- Invalid Transaction Report
- Division Aging Report
- Active Projects with Completion Dates within 30 Days
- Unauthorized Expenditure Detail Report
- Active Projects w/Unauthorized Items
- Authorization Listing
- Items Made Non-Billable during Period X
- Revenue Write-offs during Period X
- Unbilled Receivable/ Undistributed Revenue –Audit
- Unbilled Receivable/ Undistributed Cost Aging
- Manager's Project Status
- Operating Statement
- Budget & Expense Report
- Budget & Expense Exception
- Near-Term Financial Action

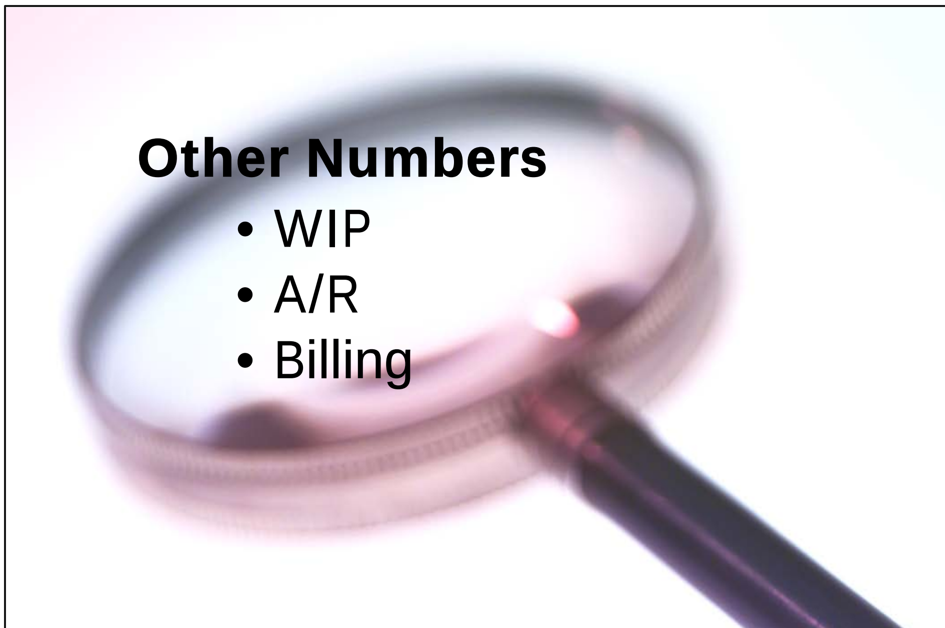
The 5 Numbers PMs Really Need

Weekly

1. Labor Detail
2. Direct Cost Detail

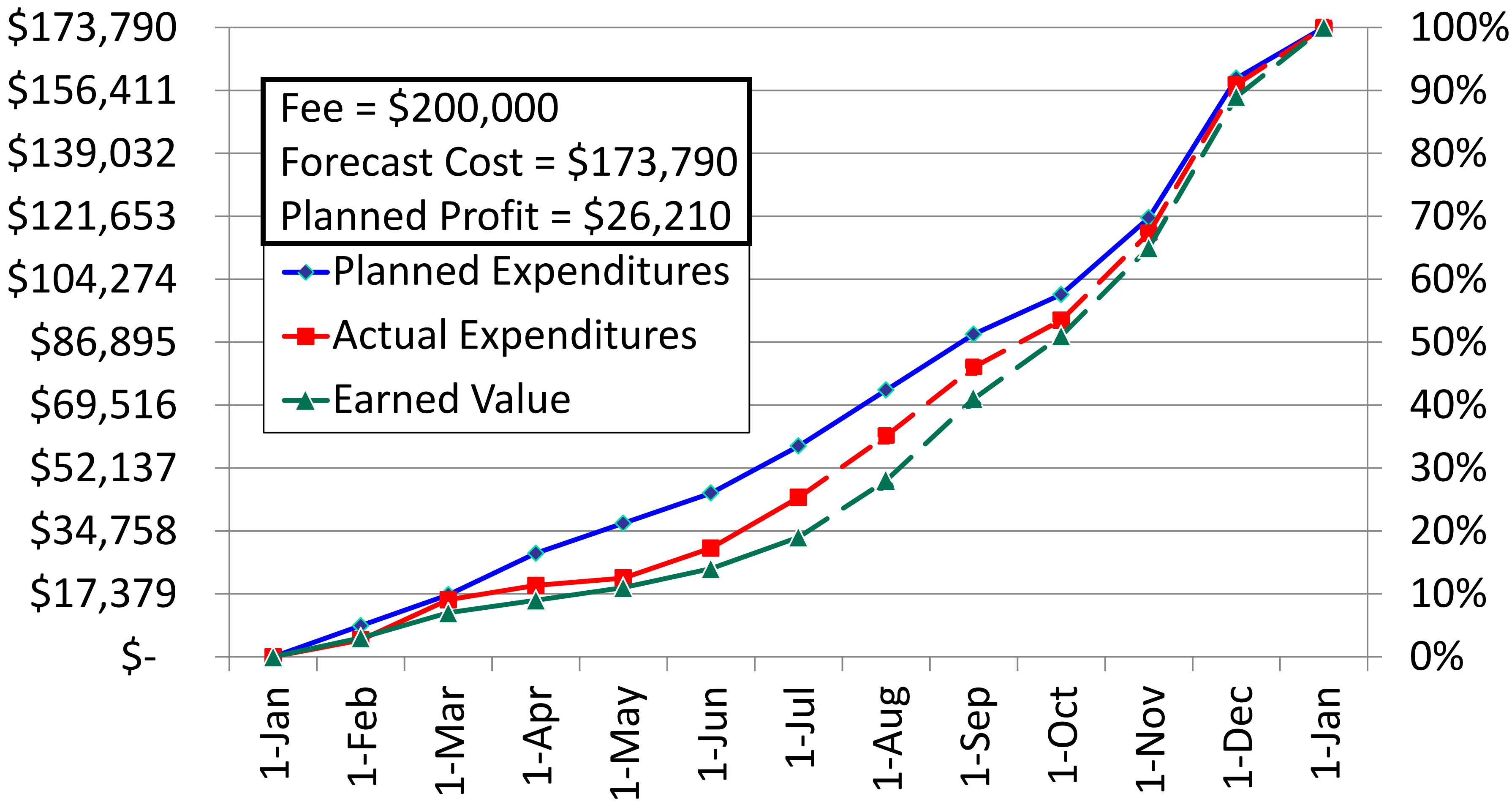
Inception-to-Date

3. Labor Costs
4. Direct Costs
5. Subcontractor Costs

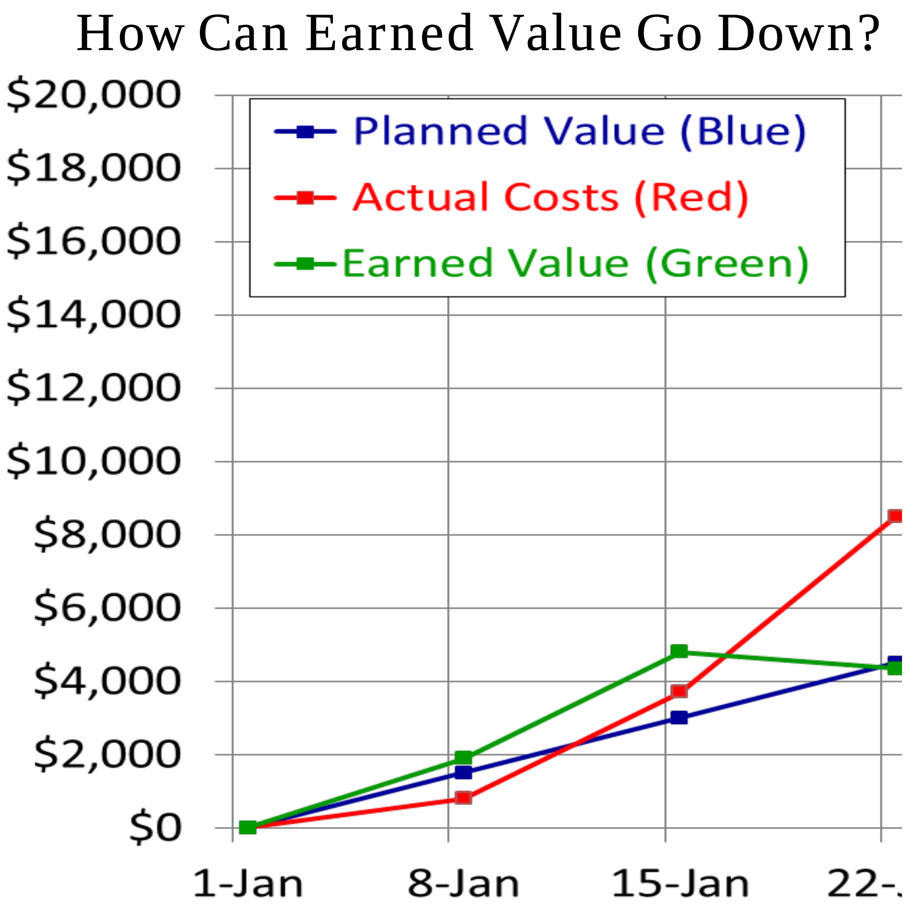


Accounting Tells Us Project-To-Date Costs $44,000 as of June 30

It's Not Too Late to Recover the Original Financial Forecast



With Practice, You'll Learn to Read the Clues



What Does a Principal Need to Know?

1. Is the job set up properly in the accounting system?
2. Has a PM Plan been prepared and distributed to the team?
3. Are there pending change orders that need to be formalized?
4. Has the job been billed recently?
5. Are payments current?
6. Is the job running over or under budget? If not, what corrective actions are being taken?
7. Is the project on schedule? If not, what corrective actions are being taken?
8. Are the firm's QA requirements being followed?
9. Is the client happy?

Common Pitfalls in Implementing Project Reviews

1. Allowing PMs to select which projects are to be reviewed
2. Scheduling reviews "when time is available"
3. Doing the reviews for the benefit of corporate managers
4. Making reviews optional at the business unit level
5. Beating up PMs who present unfavorable project status
6. Not dealing with PMs who "don't get it"

And How to Avoid Them

1. Require every PM to present one project per month
2. Don't try to review every project every month
3. Dedicate 1 to 2 days every month for Project Reviews
4. Put dates for Project Reviews on your Fiscal Calendar, within 2 weeks after the close of an accounting period
5. Publish list of projects, subject to review <u>that month,</u> 1 to 2 days before the reviews
6. Follow up on PMs' action items from the prior reviews
7. Tweak the process as you gain experience
8. Don't forget, it is <u>not</u> an inquisition, it <u>is</u> a coaching opportunity
9. Accept that 20% of your PMs won't "get it" – and deal with them appropriately

One Firm's Project Review Process

1. All PMs will submit Earned Value reports to their Office Managers each month.
   - PlanTrax® for fees > $100,000
   - PlanTrax® Lite for fees < $100,000 (or PlanTrax® if PM prefers)
2. Each Office Manager in conjunction with the Regional Manager will select a day each month to conduct project reviews. Time allocated will be 30 to 60 minutes per PM, at the discretion of the Office Manager. Office Managers will have a schedule in place on or before November 1.
3. Office Managers will advise Regional Managers, PICs, COO and CFO which projects are scheduled for reviews each period. Regional Managers, PICs, COO and CFO will attend at their discretion (either in person or via web).
4. Each PM must present at least one project each month. If the Office Manager is also the PM, the Assistant PM will present the project.
5. Project reviews will include both PowerPoint and Excel templates (plus other clarifying management information that the PM may want to include).
6. The COO will monitor the implementation of this process.

How Many Projects Can I Manage?

Assume PM = 10% of total project hours

A. Time spent managing projects = ______ %

B. Total hours you work per year = ______ hrs/yr

Average hours/week = _______ x 52 wks/yr = ______

Holiday, vacation, sick = _________ (nominally 280)

C. PM hours available = A x B = ______ hrs/yr

D. Project hours managed/year = C / 0.1 = ______ hrs/yr

E. Your firm's average billing rate = $______ /hour

F. Net fees you can manage = D x E = $______ /yr

G. Net fees you actually manage = $______ /yr

H. PM overload = G – F = $______ /yr

Note: This calculation assumes all work is done by in-house staff.
For subcontracted work, multiply by 5.

How Do I Find Time To Do All This?

Urgent	*Important*

Time Management Matrix

	Urgent	Not Urgent
Important	I ***Manage***	II ***Focus***
Not Important	***Deception*** III	***Waste*** IV

Source: Covey Leadership Center, Inc

Are You High Performance?

High Performance Organizations

Typical Organizations

	Urgent	Not Urgent
Important	**I** ***20-25%*** 25-30%	**II** ***65-80%*** 15%
Not Important	***15%*** 50-60% **III**	***<1%*** 2-3% **IV**

Source: Covey Leadership Center, Inc

If You Want to Learn More...

PSMJ Resources

1. Financial Statistics Survey
2. Fees & Pricing Survey
3. Project Management Bootcamp
4. Principals Bootcamp
5. CEO Forums on O/T and M&A
6. PSMJ Monthly Newsletter

Other Resources

1. "Managing the Professional Services Firm" by David Maister
2. "Good to Great" by Jim Collins
3. "Staying Small Successfully" by Frank Stasiowski

And In Conclusion...

Please fill out the evaluation form:

Call on us if we can help you

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We hope to see you again soon!!!