

THE VIEW FROM THE CUTTING EDGE 4

or

Things I Learned in the Great Software Wars

by Larry Bernstein

On People

On Managing Projects

On Bureaucracies

On Projects In Trouble

concerning commitments

concerning shipping

On Rx For Recovery

On Standards

On Holding Unsuccessful Meetings

On Leadership

On Teams

On Vision

ON PEOPLE

Challenge the people; the people will manage the job.“

“Travel is fatal to prejudice, bigotry and narrow-mindedness, and many of our people need it sorely on these accounts. Broad, wholesome, charitable views of people and things cannot be acquired by vegetating in one little corner of the earth all one’s lifetime.”

Twain

We want the best talent we can find, no matter what human body it comes wrapped in.”

Martersteck

“

All employees benefit from work climate improvements done to help women or minorities.

Eliminate sexist, racist and ethnic jokes from the workplace.

English is an ambiguous language. Consider, “Aren’t you coming?” and, “You didn’t do it?” Both yes and no are the right answer.

“Training is everything: a peach was once a bitter almond. Cauliflower is nothing but cabbage with a college education.”

Twain

The hottest places in hell are reserved for those who don’t stand up for their colleagues when they are being abused

“If I’m not for myself, who will be?
But if I’m only for myself, what am I?
And if not now, when?”

Hillel

ON MANAGING PROJECTS

In all cases, do the right thing and carry your resignation in your pocket.

If you can't measure it, you can't manage it.

“A foolish consistency is the hobgoblin of little minds.”

Emerson

Short-term strategy:

 In a pinch, mortgage management discipline for sales.

Long-term strategy:

 Mortgage sales for management discipline.

Without a today, there is no tomorrow; without a tomorrow, why bother?

A manager learns project management, then uses it, then teaches it, and finally inspects to see if others are using it.

A manager protects the company's assets.

There are too many hypochondriac systems flooding network managers and their support systems with too much unnecessary data. Data does not equal information.

Germinate new projects for six months. Challenge two or three of your best people to come up with a working prototype as a feasibility model. Give them the tools. Leave them alone and don't control them. Decide after six months if the work should stop or be expanded into a project with formal controls.

Software managers should understand software.

Software managers should read a few listings.

“Perfection of means and confusion of goals seem, in my opinion, to characterize our age.”

Einstein

 Project organizations tend to be successful.

 Functional organizations tend to be efficient.

 Organize by project when either the problem or technology is not understood.

Firm commitments are best made after a prototype works.

New projects need new tools, or at least sharpened old ones.

Upgrading development tools after the design is complete can destroy a project.

A project manager must be responsible for the technical integrity of the system and must have the authority to make trade-offs among the three main ingredients of project planning which are:

1. Resources
2. Schedule
3. Capability

Your boss or customer can control any two, but you as the project manager must control the third.”

Buckel

Permit some redundant development.

First make your organization responsive to problems. Then make it anticipate them—gather detailed field data.

Go to the coffee machine; that’s where it’s happening.

Don’t agree to do something you don’t intend to do, but agree to do something different.

Nobody lies! When you get contradictory reports bring those involved together and hash it out. People have their own, sometimes quite different, perceptions of the same situation.

The completion of each milestone must be measurable to be meaningful.

Pay attention to details. Successful software management demands keeping track of details.

Make a big project into lots of small ones.

“The control of a large [development] staff is the same in principle as the control of a small one. It is merely a question of dividing up their numbers. [Developing] with a large staff under your command is no way different from developing with a small one. It is merely a question of instituting communications.”

Sun Tzu

ON BUREAUCRACIES

Every bureaucracy has its own language, learn it and use it. For example say, “We have identified several problems in your latest release,” not “You gave us garbage; nothing works.”

“If they don’t make their numbers, start cutting their expenses.”

Stanzione

“A banker is a fella who lends his umbrella when the sun is shining and wants it back the minute it begins to rain.”

Twain

There are three ways to deal with conflict between organizations: the **bear hug**, the **catfight**, or the **ameba** approach. When your organization is weaker than your adversary’s, employ the **bear hug**. That is, grab hold of their position and follow it, sticking with them in whatever direction they go. Continue to suggest ways to strengthen your organization, but let them take the lead and hold on for dear life. When two organizations are about equal in strength, they **cat fight**. **Catfights** lead to no gain for anyone, so avoid them. Build your organization and cooperate. When your organization is stronger than your adversary’s, surround them, engulf them and digest them, as an **ameba** would.

Yield and you need not break,
Bend you can straighten,
Torn you can mend...

Lao Tzu

“The amount of attention you can expect from a support organization is inversely proportional to the square of your ranking on their priority list.”

Graveman, 1980

“Regularly ask this question: Knowing what we know now would we continue this process, this product, this precedent, this meeting...”

Drucker

Knowledge not position is power.

.
When your management is making a decision, hold refinements until after the decision is made- don’t giggle their arm when they are pouring.

Take credit for success if you would take the blame for failure.

“The service in more than one company has been made intolerable for people of spirit and creative ability by the arrogant and dominating spirit of the management. Those who continue to sacrifice their individuality to the whim or the arbitrary rule of their superiors,

in time lose their ambition and initiative; and the organization declines to a level of routine, mechanical efficiency only once removed from dry rot.”

Scott, *Increasing Human Efficiency in Business* (1911)

The organization should fit the people, not the other way around.

The Entrepreneur's Ten Commandments

1. Come to work each day willing to be fired.
2. Circumvent any orders aimed at stopping your dream.
3. Do any job needed to make your project work, regardless of your job description.
4. Find people to help you.
5. Follow your intuition about the people you choose, and work only with the best.
6. Work underground as long as you can – publicity triggers the corporate immune mechanism.
7. Never take a chance on a decision against you–Don't ask a question you don't want the answer to.
8. Remember it is easier to ask for forgiveness than for permission.
9. Be true to your goals, but be realistic about the ways to achieve them.
10. Honor your sponsors.

Ways to Lose

1. “Assume” the customer
2. Dis-invest in quality
3. Ignore design
4. De-Emphasize manufacturing
5. Avoid the low end of the market
6. Do it alone
7. Underestimate the competition
8. Organize traditionally
9. Develop talent narrowly
10. Don't question your success

ON PROJECTS IN TROUBLE

The project is in serious trouble when the project manager says:

1. “The load is twice what we expected and we need a bigger machine.”
2. “The customer is late with the requirements.”
3. “Yes we have schedules and we must have specific development intervals. No, we don't have a definition of what the system is to do.”
4. “Our economics are somewhat worse than we projected.”

5. “I’ve been in software for ten years. I manage it without really understanding it.”

Managers disagree on facts and argue without data.

There is disagreement with the customer, particularly on delivery.

The savings are not as originally projected.

“The dumb user isn’t trained, that’s why,” is heard in project meetings

Key people are shifted from crisis to crisis.

Key people leave.

People are uncertain of their roles.

Poor inter-organizational relationships create anarchy.

If no one is responsible everyone is responsible.

Critical items are not being tracked.

There is an influx of inexperienced software people.

Preoccupation with enforcing standards rather understanding them leads to unused standards.

Software design is ad-hoc.

Storage and real time constraints compromise design.

Support-tools limit programmer productivity.

Program listings are unreadable--there are too many or too few comments.

Bugs are found late.

Program administration and software manufacturing are ignored

Concerning commitments:

1. Few being made

2. Some being made before features are known
3. Some being made without plan for accomplishing
4. Firm commitment dates exist without a specification or development plan.

Concerning shipping:

1. To first site before testing is complete.
2. To more sites without a controlled soak-in.

ON R_x FOR RECOVERY

Calmness in crisis is essential; panic leads to failure.
Fix the problem, fix the process, but don't fix the blame.

Establish a development strategy.

Reassess commitments and do what can be done quickly- delay the rest.

Build the confidence of the team by achieving and celebrating short-term successes.

“Once a development program starts, do not change it until you have achieved a significant milestone. Continuing redefinition not only destroys the morale and self confidence of the developers but leads to sloppy work habits. Everyone needs closure to see that they have accomplished something.”

Yuhua

Hold a project management audit. The auditors should be experienced project managers.

When taking over a new organization, approach it as you would a pinball game:

Understand the situation and your relevant experience.

Make your first move to get the highest payoff. Be careful not to tilt.

Now make your next move. Changes should continue in this step-by-step way.
Large changes may well tilt the organization.

Find out who you can trust and ask them what needs fixing and how they might fix it.

‘No’ is the hardest word to say in a crisis.

When you know very little about a problem it is easy to suggest solutions.

“You need not expect to get your book right the first time. Go to work and revamp or rewrite it. God only exhibits his thunder and lightening in intervals, and so they always command attention. These are God’s adjectives. You thunder and lightening too much; the reader ceases to get under the bed, by and by.”

Twain

“There are those who scoff at the school boy, calling him frivolous and shallow. Yet it was the school boy who said, ‘Faith is believing that what you know ain’t so.’”

Twain

“Insanity is continuing to do the actions we’ve always done and expecting to get different results.”

Dupont

ON STANDARDS

Don’t try to standardize an evolving process.

Proposed standards can be very beneficial; imposed standards are disastrous.

Standards are not only meaningless; they are dangerous when they are not readily understood

The most important part of a standard is its applicability clause, which exactly specifies when *not* to use it.

“Standardized” methods are practiced “standards” only when widely accepted.

Compatibility is easier to achieve than conformance, and usually is all that is needed.

“Humble standards do not attempt to impose impossible, unacceptable, or impractical levels of standardization. Humble standards are not easy to design.”

Ross

ON HOLDING UNSUCCESSFUL MEETINGS

Never start a meeting on time.

Never have an agenda.

Never write detailed meeting minutes- and never distribute the minutes that are written,

“No questioner should be allowed to finish asking a question.

The answer need not be limited to the narrow subject that the questioner had in mind.

Under no circumstances should the speaker be permitted to answer questions—the speaker is clearly the least qualified person present.

It is desirable to have as many of the audience as possible answer the question—this brings the maximum wisdom to bear.

Having only one person speak at a time is wasteful—simultaneous inputs are much more efficient.

Side conversations are highly desirable—they create an atmosphere conducive to communication.

Full time attendance at a meeting is to be deplored—having members come and go adds variety to the occasion.”

Ross

ON LEADERSHIP

A leader has unwarranted optimism.

In war: resolution
In defeat: defiance
In victory: magnanimity
In peace: good will

Churchill

“Oh, it is excellent to have a giant’s strength, but it is tyrannous to use it like a giant.”

“Measure for Measure,” Act II, Scene II, Shakespeare

A leader is best when people barely know he exists.
Not so good when people obey and acclaim him.
Worst when they despise him.
But of a good leader, who talks little,
When his work is done, his aim fulfilled,
They will say, ‘We did this ourselves!’

Lao Tzu

The less a leader does and says, the happier his people.
The more a leader struts and brags, the sorrier his people.
Therefore a sound man is square but not sharp
Honest but not malign,

Straight but not severe,
Bright but not dazzling

Lao Tzu

“The effective...manager...is perceived...as unswerving, uncompromising, and relentless in the pursuit of excellence. That perception cannot be based on a mere image; it must reflect a genuine, deep personal commitment to excellence.”

Sloma

“The prince must have a mind disposed to adapt itself according to the wind, and as the variations of fortune dictate, and not deviate from what is good if possible, but be able to do evil if constrained...”

He must also show himself a lover of merit, give preferment to the able, and honor to those who excel...because there is no other way of guarding one's self against flattery than by letting people know that they will not offend you by speaking the truth; but when everyone can tell you the truth, you lose their respect. A prudent prince must therefore take a third course, by choosing for his council wise (people), and given these alone full liberty to speak the truth to him, but only of those things that he asks and of nothing else; but he must ask them about everything and hear their opinion, and afterwards deliberate by himself in his own way, and in these councils and with each councilor comport himself so that every one may see that the more freely he speaks, the more he will be acceptable. Beyond these he should listen to his decision. Whoever acts otherwise acts precipitately through flattery or else change often through the variety of opinion, from which it follows that he will be of little esteem.”

Machiavelli

When more than one is responsible, none are responsible and the one responsible must have authority.

A leader lives in a fish bowl.

“ I suppose that everyone has some idea of what a great man is. For me, a great man should be clear and consistent—he should be someone you can know, not a puzzle without a solution. He should have the sort of strength and wisdom, which affect others, so that those who associate with him are changed for the better. He should accomplish substantial things himself.”

Pierce in preface to Seventy-Five Years in an Exciting World by Friis.

Some organizational conflict is essential for innovation, but too much conflict can destroy an organization. A leader must be tuned in to the degree of conflict and relieve pressure before it destroys the organization.

Never play one of your subordinates off against another to make your job easier.

“A successful leader is one who gets his enemies to support his positions - not just his friends.”

Eisenhower

“The biggest difference between managers who are leaders and those who are simply cooperative office holders is that leaders embody the traits and virtues valued by an organization. They become role models. Others admire, respect, want to follow them - and do.

Typically, Leaders communicate more and they communicate more effectively. When they talk, people listen. A charisma, an air of drama draws people to them; in turn, leaders are hugely responsive to their followers. Real leaders are nurturers, caring for their followers much like a coach cares for team members.

Specifically, how can we identify leaders within an organization? First, we look for people who add significance to the work of others. They make the work flow better, easier and with more satisfaction for the group,

Assertiveness is another key quality - taking risks, confronting their supervisors, volunteering feedback. In other words, leaders are people who clearly ‘give a damn.’ Too often such folk are seen as rebels and malcontents rather than recognized as having the qualities of which gifted managers are made. And that’s too bad. We might ask ourselves why we savor stories about current senior managers who once were rebels themselves.

Another point to consider is, who wants to lead? Those who seek the power to instill ideas and to move people towards valued goals generally make good leaders. Those who say, ‘I want to lead, I feel I can lead’ should if other qualifications are present, be listened to.”

“The Seven Deadly Sins: Wealth without work; Pleasure with conscience; Knowledge without character; Commerce without morality; Science without humanity; Religion without sacrifice; Politics without principle.”

Gandhi

ON TEAMS

A group of people *dedicated to successfully reaching a common goal* is a team.

What is the difference between a mediocre and a championship team? Is it scheduling numerous practice sessions, securing the best talent available, or devising innovative strategy? These are important, but the single most important goal that a team must embrace is a 100% determination to be the best.

Winning team members:

1. Want to be in the game. They are not content to sit on the sidelines and watch the action; they want to participate in the effort and share in the victories.
2. Are highly and visibly enthusiastic. It is contagious. Contributions are recognized and rewarded, resulting in increased confidence

3. Desire to be a top performer and realizes that open and honest feedback among coaches and other team members is critical to individual and group success. Asking, “How am I doing?” or “How can I do my job better?” ensures that opportunities are available to always improve knowledge and skills.
4. Use the word “we” rather than “I”, realizing that strategies are developed for group action.
5. Respect the talents and abilities of fellow teammates, while analyzing the strengths and weaknesses of rivals.
6. Understand the value of communication – that it’s important to know where the team is going and how individual action can attain the goal.
7. Anticipate change and react quickly while continuing to drive toward the goal.
8. Have confidence in their team, their coaches, and themselves.

ON VISION

A positive vision is necessary, but a vision without action is a dream.

State the vision crisply: ‘Victory or Doom’ is better than ‘Maximum Success or a Reasonable Alternative.’

Have a vision that everyone uses to guide daily decisions, for example:

- ‘Achieve 80% flowthrough’
- ‘Save \$50 per telephone line per year.’
- ‘Hit a bullet with a bullet.’
- ‘Realize 99% availability.’