

## Acknowledgements

I want to thank Brian Lawrence, Elisabeth Hendrickson, Karl Wieggers, and Jerry Weinberg for their valuable review comments.

## References

1. Gause, Donald C., and Gerald M. Weinberg. *Exploring Requirements, Quality Before Design*, Dorset House Publishing, New York, 1989.
2. Lawrence, Brian. Requirements Happens, *American Programmer*, April 1997, Vol. 10, No. 4.
3. Rothman, Johanna. Retrain Your Code Czar, *IEEE Software*, March/April 1999.
4. Weinberg, Gerald M. *Quality Software Management, Vol.4: Anticipating Change*, Dorset House Publishing, New York, 1997.
5. Weinberg, Gerald M. *The Psychology of Computer Programming*, Silver Anniversary Edition, Dorset House Publishing, New York, 1999.
6. Wieggers, Karl. *Creating a Software Engineering Culture*, Dorset House Publishing, New York, 1996.
7. Wieggers, Karl. *Software Requirements: A Pragmatic Approach*, Microsoft Press, Redmond, Wash., 1999.

## Note

1. Disfavored users work in a way that is counter to the system. Hackers, coding cowboys, and test gatekeepers are examples of disfavored users.

### About the Author



**Johanna Rothman** observes and consults on managing high technology product development. She is the founder and principal of Rothman Consulting Group Inc., and is a member of the clinical faculty of The Gordon Institute at Tufts University, a practical management degree program for engineers. Rothman publishes *Reflections*, a quarterly newsletter about managing product development, and is the author of *Hiring Technical People: A Guide to Hiring the Right People for the Job*.

Rothman Consulting Group Inc.  
38 Bonad Rd.  
Arlington, Mass. 02476  
Phone: 781-641-4046  
Fax: 781-641-2764  
Email: jr@jrothman.com  
Internet: www.jrothman.com

# The Determining Factor

by Doug Dynes  
*SBSI Consulting*

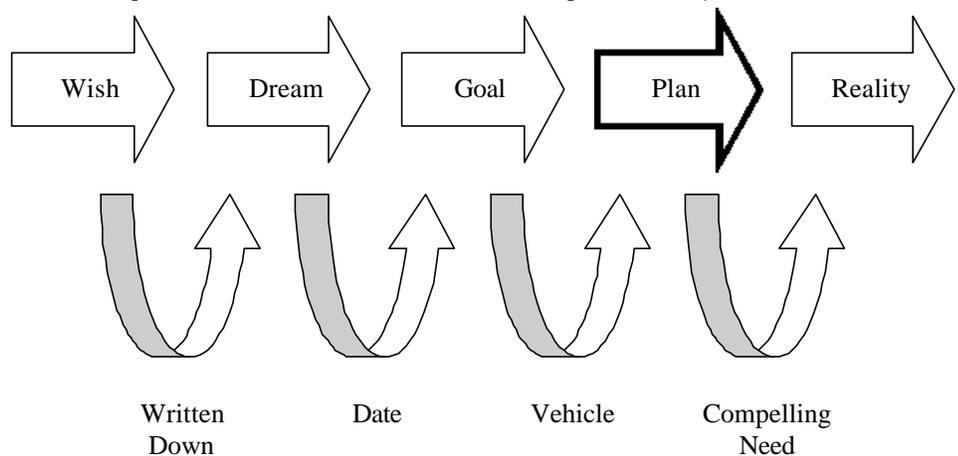
During the past six years in the process improvement consulting world, we have found one common factor in successful organizations. Not surprisingly, organizations that have failed share the same factor, or rather the lack of it. This determining factor is strong senior-level sponsorship. The Software Engineering Institute's Managing Technological Change (MTC) course demonstrates the power of sponsorship during the "roles" section. The course helps organizations identify key barriers to change efforts at any level. The senior-level sponsor is the "authorizing sponsor." This is the one person who can say "yes" to economic or strategic issues when everyone else says "no" and the effort proceeds anyway. This is also the person who can say "no" when everyone else says "yes" and the effort stops.

Throughout the many workshops, courses, and seminars we have given, sponsorship always becomes the main issue. If an organization has strong sponsorship, the chances for success increase exponentially. But a sponsor must do more than bless an effort, give it some funding, and direct the improvement group to make the project happen. A successful improvement effort needs a committed sponsor, not just an involved sponsor. The best way to define the difference between committed and involved is to make a comparison between a chicken and a pig in breakfast. The chicken is involved by giving its eggs and the pig is committed by giving its life. Senior-level sponsors need to exhibit commitment.

Leadership is influence. A strong sponsor has to establish and foster a vision, define the compelling need, establish a management team that turns the vision into reality, and stick with it until the end. A sponsor needs to lead with vision, not manage by it.

Four initial building blocks are needed to start improving an organization: a mission, a vision, goals, and a strategic plan. Only the sponsor can move an organization from the strategic plan to reality. Far too frequently, organizations minimize the importance of a mission, a vision, goals, and strategic planning. Senior-level managers find these tasks to be unrewarding and to be in the way of doing their real work. But this is their real work.

The following model demonstrates a method of bringing an organization from the status quo, or an ad hoc environment, to an improved reality.



The first step in this process is the wish, or the original ideas and thoughts on how an organization can improve. A wish does not become a dream until it is written down. This is critical. Too often, sponsors think their organizations know what the sponsors want. Organizations will never know what their sponsors want until the sponsors tell them.

A dream becomes a goal when a date is given to it. Sponsors need to be leaders who are willing to draw the line in the sand. The organization's goals, coupled with a chosen vehicle, will yield the organization's strategic plan. This vehicle typically is

composed of a model used to measure progress, a process improvement group used to facilitate the change, and an established management steering group used to direct the organization's business. The authorizing sponsor needs to chair the management steering group.

The next step is moving the organization from the strategic plan to reality. Only a compelling need will move an organization forward, and only the sponsor can define the compelling need. This phase contains the real work. The sponsor will spend most of his or her time reinforcing the need for the change, which amounts to teaching the plan.

Many organizations fall far short of improved reality. Perhaps a strategic plan was completed, but it ended up as shelfware and now the organization has another failure attached to its culture. The key to avoiding this failure rests in the ability of the management steering group. This provides the leveling plane. If an authorizing sponsor is strong enough, he or she can force the change to happen at the expense of the organization's livelihood. We have seen firsthand where a sponsor forced the issue. The change occurred, but caused workers' divorces, early retirements, higher attrition, and severe medical problems. When the sponsor left, there was no support structure to maintain the pace, the improved reality evaporated, and the effort became another statistical failure.

An established and functioning management steering group is composed of the authorizing sponsor and his or her direct reports. This group meets on a reg-

ular basis. In this forum, all management decisions concerning any and all resources need to be made. In this instance, resources are defined as money, time, people, and the product's functionality. This meeting provides a forum where the direct reports inform the boss of the good, the bad, and the ugly. Counseling with the sponsor about a situation before it becomes a problem should always be welcomed. The easiest way to gain this insight is to review and show the status of all projects during the meeting.

The use of project status reviews in management steering group meetings has facilitated outstanding process improvement results with our customers. We have seen rapid changes for the better in general project management, quality assurance, and performance measures. These areas comprise most of the Key Process Areas from the Capability Maturity Model (CMM®). The most dramatic results are found in the actual management steering group members. They have found that when the executive leadership manages the organization proactively, they spend more time in the decision-making process and less time putting out fires.

The inspired change agent must obtain sponsorship for the organization's improvement effort. If the sponsor is unsure, the change agent should begin by educating the sponsor on the need for this. We have seen this education process take weeks. In other instances, it never happens. If the sponsor sees the need and is willing to act, you have won your sponsor. The change agent must be ready

to provide a solid plan for implementing change. If the sponsor fails to see the need or is unwilling to act on the need, the effort will fail.

In conclusion, the main thrust of this article is about people, not technical issues. We live in a society where our culture is good at getting new technology into the market place, but is very poor at getting our culture to adopt that new technology as a way of doing business. Technology is not and never will be the problem. It is the people working with the technology that cause the problems. Solve your people problems and the technical problems will find a way of fixing themselves.

The senior sponsor is supposed to lead and direct people. If the sponsor would do that, there would be no compelling need for this article.

### About the Author



**Doug Dynes** graduated from the U.S. Merchant Marine Academy with a degree in engineering systems design.

He is currently a Lieutenant in the U.S. Naval Reserve. Dynes has worked for the STSC since 1993 as a consultant and technology adoption coordinator. Recently, he became the senior vice president of SBSI Consulting. He is a certified Project Management Professional, SEI instructor and visiting scientist, and holds a U.S. Coast Guard Engineering license.

Voice: 801-775-5734

E-mail: Doug.Dynes@hill.af.mil

## Lyles Assumes Command of AFMC

WRIGHT-PATTERSON AFB, Ohio—Gen. Lester L. Lyles assumed command in April of the Air Force Materiel Command at Wright-Patterson Air Force Base. He replaces retired Gen. George T. Babbitt. Babbitt had been AFMC commander since May 1997.

Lyles served as vice chief of staff of the Air Force in Washington, D.C. since May 1999. He began his career in 1968 as a distinguished Air Force ROTC graduate. He has served in a variety of assignments, including program element monitor of the Short-Range Attack Missile, Headquarters U.S. Air Force in 1974, and special assistant and aide-de-camp to the commander of Air Force

Systems Command in 1978.

In 1981 he was assigned to Wright-Patterson Air Force Base as Avionics Division chief in the F-16 Systems Program Office. He has served as director of tactical aircraft systems at AFSC headquarters and as director of the Medium-Launch Vehicles Program and space-launch systems offices at the Space and Missile Systems Center. He became AFSC headquarters' assistant deputy chief of staff for requirements in 1989, and deputy chief of staff for requirements in 1990. In 1992 he became vice commander of Ogden Air Logistics Center, Hill AFB.

He served as commander of the Ogden ALC from 1993 until 1994, then was assigned to command the Space and Missile Systems Center at Los Angeles Air Force Base until 1996. He became director of the

Ballistic Missile Defense Organization in the office of the Secretary of Defense in 1996.

Babbitt was commissioned in 1965 through the Reserve Officer Training Corps program at the University of Washington. He trained as an aircraft maintenance officer and served as officer in charge of fighter flight lines in the United States, the Pacific and Europe. He twice commanded aircraft maintenance squadrons and was deputy commander for maintenance of a European F-15 wing. Prior to assuming command of AFMC, the general was director of the Defense Logistics Agency at Fort Belvoir, Va.

Other assignments included deputy chief of staff for logistics, Headquarters U.S. Air Force and director of logistics for both Headquarters Air Training Command and Headquarters U.S. Air Forces in Europe.