



Life Cycle of a Silver Bullet

Sarah A. Sheard

Software Productivity Consortium

“Attention! Throw out those other improvement methods – we have just discovered the best ever. With our method, your quality will go up and costs and cycle time will go down.” Almost any improvement method is hailed as the best way to save business from problems when it is new. Unfortunately, a few years later, this same method is now the reviled, flawed method that a new method is replacing. This parable tells how this happens.

In the 17th century, Europeans believed that silver bullets could kill werewolves. Today’s executives seek silver bullets to protect themselves not from werewolves but from sliding profits, disillusioned stockholders, and lost market share. The silver bullets for our executives are those new management trends that promise to transform the way business is done. Examples over the decades have included Management by Objectives and Total Quality Management, while Six Sigma, Lean Enterprise, the Capability Maturity Model Integration (CMMI®), and agile software development techniques are more recent methods earning silver-bullet reputations. Process improvement initiatives like these can and do work, but how they are implemented is critical to their success. The following parable shows the 11 phases in the life cycle of such an improvement initiative.

Phase 1: Fresh Start

An executive of Porcine Products, Mr. Hamm, decides to throw away all silver bullets. He decides that no one knows his company like he does. He takes a close look at how the company is working to determine what its problems are and how they arose. He also looks at company strengths to leverage them and make them more effective in the future.

Envision a little pig in a suit, wiping a bunch of architectural drawings and books off a table.

Phase 2: Executive Dedication and Openness

Hamm makes it his single-minded focus to improve Porcine Products. Having identified its problems and strengths and determined how to address them, he dedicates time and money to implementing the identified improvements and eliminating conflicting initiatives. He hires forward-thinking, intelligent managers and devotes considerable amounts of his own time to be sure that the problems are truly solved, not just glossed over. Hamm and his managers

research a number of current and future improvement methods to help define current problems and to be potential tool kits providing applicable suggestions.

The executive insists that the senior managers become part of the solution. Hamm forces them to examine their roles in contributing to company problems and to restructure their own work to change the way the company operates. A climate of openness without retribution is fostered, and senior managers listen to mes-

“A sequence of steps, each consisting of decisions made for good reasons, does not necessarily lead to a good result.”

sages from all levels of the company, especially messages suggesting improvements in their own work.

Envision a little pig constructing a house made of bricks.

Phase 3: Success

Porcine Products reaps the rewards of this thorough effort. Executives and managers change the way they lead. Cross-company improvements change the way the company operates. Products are created more efficiently and have better quality. Costs go down, orders increase, and morale improves.

Phase 4: Publicity

The business press notices the successes of Porcine Products. Hamm explains the improvements his company has achieved and is asked for a name for his method. In honor of his French grandfather, he calls the improvement Balle-Argentee. The

press also wants to report how much time and money was spent, and what was reaped from the improvements; Hamm looks back and makes estimates. From these the business press calculates the magic return-on-investment (ROI) number for the Balle-Argentee method of business improvement.

Envision a little pig proudly holding a book showing a house of bricks on the cover. The book’s title is “The Balle-Argentee Method.”

Phase 5: Momentum

Other companies look eagerly at the success of Porcine Products. Some of them are experiencing a competitive disadvantage because Porcine Products is now working more effectively than their own company, while others want to achieve the publicized ROI. Discussions at meetings of executives focus on what Porcine Products did, and why it worked.

Phase 6: First Replication

Executives at these other companies decide they want to reproduce Porcine Product’s success. They talk with Hamm and others in his company about what actually happened. Each company assigns a senior manager to oversee the implementation of this improvement method across the companies. These senior managers carefully read the literature about the Balle-Argentee method. Implementers look at their own companies’ problems and seek to implement the spirit as well as the letter of the Balle-Argentee approach. When they make recommendations, they listen to suggestions for improvement in their own work. They keep close watch on expenditures and benefits of this approach so they will be able to report their ROI.

Envision two or three other little pigs constructing house of wood.

Phase 7: Confirmation

Some of these companies publish studies of their own success using the Balle-

Argentee method. The studies cite the specific improvements each company decided to make. Because of the attention paid to investments and returns since the adoption of Balle-Argentee, this set of companies can cite precise ROI figures. These companies earn accolades from shareholders for fiscally effective management. General business books about this method are published, including "Balle-Argentee in Warp Time," and "Balle-Argentee for Small Companies."

Envision a collection of books with houses of wood on the cover.

Phase 8: Proceduralization

Many more companies decide that this method is valuable. The ROI convinces some, and the fact that their competitors are reaping the returns from Balle-Argentee convinces the rest. With this second set of companies, the executives and senior managers add Balle-Argentee as one more method in their current process initiatives. Because they cannot adequately focus on all of the methods, they delegate implementation of the Balle-Argentee effort to middle managers. These middle managers are given ROI goals that match the published numbers. Other middle managers are given comparable ROI goals for simultaneously implementing different process improvement efforts. Executives believe that the competition engendered by these multiple initiatives will increase the fervor in implementing all the initiatives.

What the implementing managers know about the Balle-Argentee method is limited to the published results. Time constraints prevent these managers from contacting Porcine Products or from reading any of but the shortest summary articles. To reduce the risk of missing their ROI goals, the managers seek ways to improve the cost-effectiveness of Balle-Argentee as they implement it. Implementation that took Porcine Products several years must now be completed within a fiscal cycle. The implementing managers require their people to use some of the specific improvements described in the literature exactly as they are described, without costly discussion or modification. Other specific improvements are ruled out because they would be costly to implement. The stated rationale is that these improvements will not work here because company circumstances differ.

Instead, the implementing managers restate general strategies in the Balle-Argentee literature as broad goals, which

they then apply in a sparing manner. In almost all cases, the imperative for executives and managers to listen to workers and to change their own work accordingly is the first general strategy to be deleted. It is restated as *improve communication* and then becomes implemented as *improve communication downward*. These implementing managers have risen in their companies because they respect the wisdom of their superiors. They do not ask for literal implementation of the strategy *executives must listen more* because to do so might cause their superiors to feel threatened or embarrassed.

Finally, these implementing managers seek to cast their own actions in the best light. They believe involving executives would signal weakness. Much of the implementation of Balle-Argentee shifts to managing the news. Executives and senior managers remain uninformed and are uninvolved in the improvement effort except in expecting to reap benefits.

Envision an entire village of houses made of straw.

Phase 9: Diminished Returns

Because of cost cutting, time compression of the improvement effort, lack of executive involvement, dilution of emphasis due to other improvement initiatives, and a tendency to apply the steps as a checklist rather than to seek and fix the company's basic business problems, these more recent Balle-Argentee improvement efforts do not reap the published ROI numbers. This happens broadly across the industry.

Envision the village of straw houses starting to crumble, propped up by sticks and invaded by mice.

Phase 10: Blaming the Method

Workers in these companies feel bombarded by misunderstood management initiatives, and Balle-Argentee is applied intrusively asking for additional work in order to claim compliance. Workers know that the checklists they are being asked to follow and fill out are not solving any real problems. Some attend conferences and complain that the Balle-Argentee method makes companies do stupid things. They cite their experiences, complaining that the Balle-Argentee sponsor does not want to hear about any real problems that are not quickly solved. They complain that checklists and complex documentation substitute for investigation and solutions,

and that the intense focus on the ROI severely decreases the investment money for making complex improvements rather than applying Band-Aids.

Coupled with the evidence from Phase 9 that current implementations of Balle-Argentee do not provide good ROI, these very real complaints cause the business press to be ruthless in denigrating Balle-Argentee as a flawed approach. Articles appear advocating slaying the Balle-Argentee monster.

Envision the big bad wolf blowing down the village of straw houses.

Phase 11: Starting Fresh

Mr. Boar, a true improvement-minded executive at Animalia, Inc., decides that no one knows his company like he does. He decides to throw out Balle-Argentee along with all the other silver bullets and takes a close look at Animalia's problems and how to fix them.

Envision a different little pig wiping a bunch of books and drawings off his desk. One of the books has a picture of a house of bricks on the cover.

Morals of the Story

- A sequence of steps, each consisting of decisions made for good reasons, does not necessarily lead to a good result. In the parable, each executive and manager was making good decisions within the constraints established by those higher up. The end result was disastrous.
- For best results, start at Phase 1 and stop at Phase 3.
- Only by really looking at your company's problems can you solve them. Other people's strategies worked for them because the strategies were made for them. If you want to make real improvements, you have to do the work of determining your business problems and applying methods that make sense to fix them.
- Do not assume that people who claim to be using a method really are using it. In Phase 8, actual use of the original method ceases. Instead we have a method bearing the same name that attempts to reap results quickly and dirtily, and is thoroughly unsuccessful in doing so. (Unfortunately, Phase 8 is also where most companies try to use the method.)
- There is nothing like the original. Do not read everyone else's interpretation of a method, read the original. If possible, talk to the creator. Find out the

principles behind the steps, so you can ensure your adaptation is consistent with the principles.

- The ROIs of multiple improvement initiatives do not add; they interfere. Focus on what problems you want to solve, and work out as executives how the initiatives contribute to solutions. Determine where the initiatives will appear as conflicting to the workers and reconcile them. Display a unified front to the workers.
- Do not assume other companies' ROI numbers will apply to you. They started from a different place and made different investments [1].

How to Use Silver Bullets

A great deal has been written about the appropriate way to do process improvement. You must focus on the business goal of improvement, not just on the method used to get there (e.g., CMMI) or on intermediate indicators (e.g., Level 3) [2, 3]. Executives must devote the appropriate resources and stay involved [4]. Managers must learn what is real and react appropriately [5, 6]. The process group must analyze the real causes of problems [7], plan changes, get them approved, and make sure the organization follows through [8]. And everyone must make sure the changes actually improve the product development processes, not interfere with them.

Specific guidance on how to avoid making mistakes with a silver bullet follows:

- **Everyone:** Realize that all methods are a means to the end of an improved company, not the end themselves. You cannot paste on improvements – you have to look at how your company is working right now and how any given method will alter that.
- **Executives:** You have the responsibility to develop your own understanding of what is impeding your company's path to a better future and determining what steps will remove those barriers. Take time to understand any externally generated initiative before pushing it. Does your company even have the same problems as the companies that succeeded with the method?

Understanding your true problems requires upward communication. Know what currently makes upward communication unsafe, particularly, do your managers have incentives to tell you only good news [9, 10]? Find out what happens to bad news and where it stops. Find a way around that

barrier or you will not hear what is really happening in your company.

- **Managers:** You have to understand the method(s) you are pushing. Needing something really badly does not mean you can get it faster by means of wishing or whipping. Determine what is realistic and do not ask for shortcuts.

Insist on understanding the relationship between initiatives that compete for people's attention. Clarify that relationship, coordinate with other sponsors, and make it easy for the workers to comply with all of the initiatives. Your products make the money, not your management initiatives. You have to be sure the initiatives do not make it difficult to make the product!

- **Process Groups:** Push back on managers demanding the same results as other companies but in less time, with fewer resources, and with less thought. Point out why it is not going to happen. Then propose something that will work. Do not compound the problem by giving only the good news.
- **One Last Word:** A truly successful effort will result when a company develops specific solutions to its specific concerns. Second-generation applications of these methods can work if they are studied to determine where the true benefits came from, and applied intelligently with appropriate investment. But a house of straw is erected when companies believe they can quickly gain return from low-budget adherence to someone else's solutions. ♦

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About the Author



Sarah A. Sheard is technical lead for Systems Engineering at the Software Productivity Consortium. She has more than 20 years of experience in systems engineering and process improvement. Sheard has published more than 20 articles and papers on systems engineering and process improvement in CrossTalk, the proceedings of software technology conferences, International Council on Systems Engineering (INCOSE) symposiums, and the INCOSE journal. Sheard received INCOSE's "Founder's Award" in 2002. As the consortium's technical lead for the Capability Maturity Model Integration (CMMI®), Sheard was the lead author of the Software Productivity Consortium's course on "Transitioning to the CMMI."

Software Productivity Consortium

Phone: (703) 742-7106

Fax: (703) 742-7350

E-mail: sheard@software.org