Obedience Training for Managers

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Capability maturity model-based process improvements bring about significant organizational change. Managers and change agents are always looking for methods to bring about this type of change. The authors draw parallels between organizational change agents (or process whisperers) and animal trainers. Some of the same techniques used to train animals can be used to lead an organization to a capability maturity model and make them change.

Every software engineering process group (SEPG^{SM}) has faced that moment when it provides management with an important report or agenda only to have the manager say something like, "I want to thank the SEPG for putting together this report, but I'm not going to use it."

The SEPG's immediate reaction is to want to rub his nose on the document and scream, "Bad manager! Use the paper! Use the paper! Bad!" If only it were that simple.

Particularly in organizations with lower maturity levels, the people responsible for causing these behavioral changes can be at a great disadvantage when pitted against the *organizational culture*. However, there are some basic training concepts used in training horses and dogs that can also be useful when introducing organizations and their management to the new behavior required when implementing capability maturity model-based process improvement.

The authors will relate their experience training horses and deaf dogs to illustrate how these same concepts can be used to change behavior in an organization. Managing change requires learning new behaviors and transitioning from an undisciplined environment to one that is controlled. This is not that different from the transition required in teaching a horse to carry a rider or teaching a deaf dog sign language.

The following are some basic steps in making the transition successful whether training animals or changing people's behavior:
1. Get the subject's attention.
2. Take little steps.
3. Always teach in an environment of safety and respect.
4. Never underestimate the power of peer pressure.
5. Understand the motivational influences, and how they are used in each situation.
6. Do not reward undesirable behavior.
7. Make the desired behavior the obvious choice.
8. Failure is just an opportunity for more training.

Get the Subject's Attention
To get the subject to trust you and to be willing to learn, you must first get his or her attention. Find the best motivator for that particular subject. Food treats are often good motivators for both dogs and horses (and people, by the way). The important point is to find a good motivator for the target trainee, whatever it may be.

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The Preferred Way: Get a deaf dog's attention by offering food and then teach the sign for *treat*. Repeat this until the animal begins to respond to the sign. This will cause the subject to look forward to interacting with you, in the hopes that it will receive a treat.

The Sub-Optimal Way: Whack the subject across the nose with a newspaper. While this will get its attention, it has a greater chance to startle and cause a fearful reaction rather than a trusting one. The subject will spend time trying to avoid you and newspapers instead of looking forward to seeing you.

Organizational Translation: A good first step is to find out the subject's biggest information need and look for a way to provide it quickly. Managers are always looking for information/data about their projects. One of their biggest frustrations can come from the inability to get good status information. They quickly tire of asking, "Are you done yet?" Find a way to give them a fast response to their information need, and they will come back asking for more. The key concept here is to keep it simple.

Take Little Steps
Each of us is familiar with this concept. In school, we learned the alphabet, and then we learned to read. We learned basic addition before we learned fractions and calculus. We all learned in kindergarten (or from Sesame Street) the basics before we started applying them to more difficult problems. Our training subjects are the same way. They need a foundation upon which to grow, and time to develop from this foundation.

The Preferred Way: Training a horse to carry a rider requires breaking the training into the following steps:
1. Teach the commands for walk and whoa, but especially whoa. Repeat until it is obvious that the horse understands what you want.
2. Introduce the bridle. Put it on the horse, and then go to the next step.
3. Review the commands for walk and whoa. This shows the horse that he can do familiar things with this new tool on his head. Continue until the horse shows no signs of discomfort or confusion.
4. Introduce the saddle. Again, just show the horse that it is a new tool.
5. Review the commands for walk and whoa, reinforcing the lesson learned with the bridle.
6. Introduce the rider, again, just another tool.
7. Mount. Okay, this time the tool does something different.
8. Dismount.
9. Repeat steps seven and eight twice

more. Get the horse familiar with the new roles of rider and horse.

10. Review the commands for walk and whoa. Go back to something familiar to show that this can still be done even with the new tools and roles.

With this method, you are constantly reinforcing ideas the horse is familiar with before introducing a new command. Your horse will learn to do one thing and be comfortable with it, so when you ask for one more thing, it is not such a stretch for the horse. This makes it easier for the horse to understand that it can try one new thing.

The Sub-Optimal Way: Teach a horse to carry a rider by applying all those lessons at once.

1. Catch the horse and throw on the bridle and saddle. This will be hard because the horse will be looking at you like you have lost your mind and at the same time is trying to run away.
2. Try to climb on. This will be hard because the horse will still be trying to run away, and is pretty convinced that you have lost your mind.
3. Try to hold on – provided you are able to climb on. This will be hard because the horse will be bucking in an attempt to throw you and the gear off because you are obviously confused and do not know what you are doing, and therefore must be dangerous.
4. Try to go somewhere. This will be impossible because the horse still does not know walk or whoa or any other command, and certainly has lost all traces of faith in your ability as a leader figure.

In this situation the best you can hope for is to not break anything important. You might win the battle, but in the long run the horse will respond as if to a "crazy idea being attempted by that person again."

Organizational Translation: If you are tasked with implementing a metrics program, for example, do not expect to implement a full-blown Software Engineering Institute's Capability Maturity Model® (CMM®) Level 4 metrics program all at once. Start with one or two easy-to-collect and use metrics (in a Level 1 company this could take some creative research to develop), and get those incorporated into everyone's way of life.

Work on getting everyone to rely on these metrics. The more useful they are, the more motivated people will be to use them. As this change becomes *institutionalized*, add a few more metrics, maybe more complicated measurement concepts, maybe different charts with the same data. Then get these incorporated into the culture.

People are less resistant to small changes than large ones. If you follow these steps, you should be able to grow a culture where the individuals all rely on and support the metrics that are being used. If individuals start creating and using their own metrics, that is great! The key here is to institutionalize the concept that metrics are good.

Always Teach in an Environment of Safety and Respect

All subjects learn better in an environment of safety and respect. Studies have been conducted that show children under stress or in fearful situations have a harder time concentrating on new lessons. At work, this translates to making sure that your subjects are not defensive or afraid of looking bad in front of their peers and bosses, which can be tricky at times.

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The Preferred Way: Deaf dogs rely on their other senses heavily, especially sight, smell, and touch. Never wake a deaf dog suddenly. Allowing the dog to sniff your hand and then applying a light touch will let the dog wake without startling. Deaf dogs also react to visual distractions very easily. When training a deaf dog, find a place where you will not be disturbed, and where there is no chance for sudden intrusions that would startle and distract the dog. Find an environment where the dog can focus primarily on you and will not be visually distracted or frightened by other new things occurring around it.

The Sub-Optimal Way: Take a deaf dog to a public park for training. The park brings a new set of visual and aromatic distractions. Children rushing the dog to pet it, or other dogs coming over to play can easily startle a deaf dog and shift their focus away from you.

Organizational Translation: Find a manager's comfort zone. Especially in meetings with his or her peers or bosses, be sensitive to surrounding distractions. Do not use one manager as a bad example of a situation and another as a good example. No one should ever leave a training meeting or change-introduction session feeling like they have been set up or outed to the rest of the group.

Non-attribution should be a strict rule for the SEPG. It is very important for the SEPG to create an atmosphere of trust with managers and their staff. The staff should know that they can share their concerns with the SEPG, and that the SEPG will bring those concerns up to management without naming names. Managers must know that they can share information with the SEPG and that it will not be broadcast to the world. Open and honest communication between the SEPG and the organization is critical in forming that comfort zone for implementing change.

The SEPG should keep in mind that some people often need time to think about new ideas before they are ready to support or embrace them in front of others. The best place to teach new concepts in these cases may be in one-on-one sessions or small groups of peers. Remember that there are no bad managers, just suboptimal situations.

Never Underestimate the Power of Peer Pressure

Some of us are innovators, and some of us are not. However, those who are not tend to be more inclined to adopt change if they see someone else do it first. Peer pressure can be a powerful *change-enhancer* if used correctly.

The Preferred Way: Horse trainers use this method when teaching horses to jump new obstacles. If a new jump obstacle frightens a horse, a typical way of getting past the obstacle is to have the frightened horse follow closely behind another horse. If the other horse jumps the new obstacle, the frightened horse will usually jump as well to avoid being left behind. As a result it learns that there is nothing to be afraid of and willingly jumps the obstacle by itself the next time.

The Sub-Optimal Way: Singling out a horse for corrective action does not encourage learning. Horses are very social creatures, just like most engineers we know, and it is sometimes very difficult to get one or two to break away from the

herd and *blaze a new trail*. They are strongly motivated to stay with their peers; no amount of begging, pleading, or beating will cause them to willingly break from the herd for long.

However, one must be careful to remember that peer pressure is a motivator, not a tool of force. We want to entice the horse to jump by harnessing his urge to follow. We do not want to scare the horse into jumping by repeatedly pulling him away from the herd for discipline. He will just become more frightened by the obstacle and dig his heels in even more. Similar reactions have been observed at meetings where a manager is dressed-down by his boss in front of his peers.

Organizational Translation: Success by another manager will often create peer pressure. If a manager sees that another manager is able to respond to issues and answer a senior manager's questions quickly and effectively, he or she will want to be able to do the same thing.

Process improvement in one area can often breed process improvement in another area. A manager will want to know how things are done in another area if he or she thinks the same things can benefit his or her projects. By bringing the lessons learned and the examples from a successful project, a SEPG can use peer pressure to build process improvement in a new area of the organization.

Keep in mind that peer pressure tends to be an *instantaneous motivator*, and not a long-term motivator. However, it can be used to get the SEPG's foot in the door with a project. That provides an opportunity for the SEPG to get their attention and build some successes.

Understand the Motivational Influences and How They Are Used in Each Situation

Not all motivators work with all subjects in all situations. The trainer must determine the appropriate motivators to use for a given subject and situation.

The Preferred Way: Use praise, peer pressure, food, and encouragement. As mentioned earlier, food can be a great motivator for a young, deaf dog. When the dog begins to focus on you for treats, you can begin to teach new signs and use food as a rewarding motivator. The correct motivator will be the one that causes the dog to want to give you what you are asking for in return. This causes the dog to constantly look for ways to give you what you are asking for, because it is an enjoyable experience.

The Sub-Optimal Way: Use fear, pain, peer pressure, and force. Fear and force can easily spook a deaf dog. A frightened dog will not respond to training. The best approach is to find ways to entice the desired behavior. The less effective motivators will be those that force the desired action because once you remove the motivation, the action ceases as well. If a dog or horse is trained to do any action because the trainer adopts an *I-can-make-you* philosophy, then the trainer better be prepared to *make* the dog or horse every time he wants that behavior. Most trainers are limited in how much time and energy they have available to make animals do things.

As an example of different types of motivators, most dogs love to come into a nice air-conditioned house in August when it is 110 degrees outside. While these dogs would normally also love to go outside and play ball or learn new tricks, it is going to take a pretty strong motivator to get that

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dog to go outside at 3 p.m. on one of those days. And kicking them out of the house is not going to necessarily make it easier to get them out the next time, either. What would motivate the dog in this situation? A good trainer needs to know this.

Organizational Translation: Understand your audience and the motivational factors that are already at work. If a manager wants to look good to his boss, and his boss is asking for detailed data in his status reports, help him find a way to do this. Show him the steps to take and the process to implement in order to get what he thinks he needs.

This is the main reason that improvement activities are tied to business goals in the attempt to motivate the use of the improvements. However, there may be times that a manager does not exhibit the expected behavior. It is important in those cases for the SEPG to look for other *hidden* goals or different types of motivating influences.

Do Not Reward Undesirable Behavior

Everything you do with animals teaches them how to respond to you. People are the same way. Sometimes it is easy to unintentionally teach undesirable behavior.

The Preferred Way: When trying to house break your dog, the easiest way is to put him outside after every nap, every meal, and then every 30 minutes of play. After a while, he will learn to go to the door at these times, and will prefer to *do his business* outside.

The Sub-Optimal Way: Wait until the dog does his business then rub his nose in it, yell at him, and put him on papers. Keep in mind that dogs love attention. By making a big fuss over an *accident*, the dog is getting attention for the wrong behavior. It is an easy trap to fall into. Soon, you will have successfully trained the dog to pee on the carpet then madly run circles around the living room before diving for the papers in the kitchen and waiting for attention. While it will be quite entertaining to the outside observer, it does not exactly achieve the intended goal of the training session. The dog will be confused by all of the shenanigans, but be glad to get some attention.

Organizational Translation: If you are trying to establish process improvement efforts with a manager and he or she continues to cancel meetings or resist suggestions, do not give up. Often managers do not want to start improvement efforts because they see it as one more thing to get in the way of the *real* work. A SEPG cannot force a manager to get involved, but he or she also cannot stop trying to work with the manager. If the SEPG backs off, he or she has rewarded undesirable behavior.

Make the Desired Behavior the Obvious Choice

The right answer should be the obvious answer. Most learners will only offer up so many responses to a new situation before they give up. Conversely, if they offer up the first response and nothing bad happens, then that becomes their answer to the situation, whether it is the desired response or not. See the previous section on Undesirable Behavior.

The Preferred Way: If you want to teach a horse to load into a trailer, set up the situation so that the horse chooses to give the desired response. If you move the horse to the trailer, it has four options: move right, move left, stop, or go into the trailer. Position the trailer so that if the

horse moves right, there is a wall. The horse will not go that way more than once. If the horse stops, apply pressure, which the horse will not like. If it turns right, keep moving it in a circle back towards the opening in the trailer. The horse will tolerate this for a while, but will become bored. If the horse steps into the trailer, the pressure to move forward is removed. The horse gets to stop and rest, thereby receiving a reward.

The Sub-Optimal Way: If you just try to lead the horse into the trailer on the first try, the horse will not want to go. The trailer is dark, cramped, and smells funny, none of which will motivate the horse. If you just stand there and pull the horse forward, it is not a big problem for the horse. It can stand there all day and even take a nap. He can rest his head against the lead rope so you are basically supporting his weight. The horse has learned that if he does not want to go in the trailer, he does not have to. He can take a nap.

Organizational Translation: If you want a manager to take a desired step, make it the best option. If the manager moves right, have an unfilled senior manager's request waiting there. If the manager stops, apply pressure from a senior manager sponsor. If the manager moves left, keep coming full circle to the same idea. If the manager accepts the idea and takes the necessary step, the senior manager is satisfied and stops applying pressure, plus the SEPG quits being a nuisance about the idea.

Failure Is Just an Opportunity For More Training

If at first the ideas above do not succeed, do not give up. Review your knowledge of the manager, the motivations, and the rewards. Pay close attention to the situational aspects. Review what the manager did learn and formulate a new plan. Start the steps outlined above again. And remember, the longest journeys still begin with single steps.◆

About the Authors

Virginia Slavin has 16 years of experience in software development and management in multiple industries. Starting at General Dynamics, Fort Worth, Texas, which is now Lockheed Martin, she has worked in various development environments, including embedded, simulation, and tool development. During this time, she was also an assessment team member for several Software Engineering Institute Capability Maturity Model® (CMM®) assessments, and as a result is now an authorized lead assessor for the CMM for Software. Recently, she made the switch from the defense industry to the medical industry by joining Abbott Labs, a medical diagnostic device company, and has since been applying her broad range of experience helping Abbott climb the CMM ladder.

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