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## Managing your SAS® Assets

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### ABSTRACT

Hiring talented SAS® professionals can be an expensive proposition. While it is great to get another position for your department, replacing someone can be a real downer. Why did they leave? Was it the work? Did we make a poor hiring decision? Was it just a better opportunity? Could they have been happy here? Maybe they just did not like me.

All of these questions are valid, and you can keep guessing and never really know. As they say, an ounce of prevention is worth a pound of cure. What can you do as a manager to keep your best talent happy and challenged? Keeping those in your department engaged is a big piece of the puzzle.

Not a manager? Well, you're not off the hook either. There are things you can do to help your manager manage you better. I've been on both sides of this fence, and this paper will talk about some of the things that will help keep everyone happy. Think of your company's SAS talent as SAS assets!

### INTRODUCTION

Companies protect their physical property and data with ferocity. Theft or loss of either can be very costly. It is time that we start to think of our SAS talent in the same way. While not a company owned asset in the true sense of the word they are assets nonetheless; they are SAS assets. They deserve upgrades and maintenance just like our favorite software.

A manager's responsibility in evaluating an employee does not end after their first day on the job. You want to make sure that the level of skill represented in the interview is an accurate reflection of someone's true skill. Finding the right types of tasks for each employee is also important. Some love to create reports and hate analytics. Flip-flopping those assignments can lead to dissatisfaction and work that may not be done as well as it could be. A bored, unchallenged employee is many times an unhappy employee. Money isn't everything.

Now that you have the job, there is no reason to stop selling your boss on your skills. Letting them know what you can do and like to do will help send preferred jobs in your direction. While we all have to do some mundane tasks sometimes, wouldn't it be great if you could minimize those instances? Doing the tasks you take pleasure in makes a job more enjoyable. You should also encourage feedback from your supervisor on what you can do better. Better to learn before the annual review so you have time to make a correction. Money isn't everything.

### THE ADVANCE PARTY

After someone is hired is too late to find out they are missing some critical skill. You want to do your homework before hiring someone. Pre-screening prior to the expense of an on-site interview is a smart move. We all know that you cannot always believe what you read. Do some fact checking ahead of time. Is SAS Certification on their resume? Check it out at the SAS Global Certification Directory. If their name is not there, you may want to ask some follow-up questions.

Ask for samples of code a person has written. This will give you some insight into their style and abilities. In addition, it will give you something to discuss on a phone interview.

If you are applying for a job, make sure your credentials are up to date and can be verified by the hiring company. It would serve you well to provide links ahead of time on how they can do this. Misstatements and flat out lies tend to be found out in the end.

Two papers cited in the references provide more information on screening and interviewing SAS professionals.

### ALL ABOARD

It can take time for a new hire to make substantive contributions to the organization. Just learning the data can take weeks. However, everyone wants to contribute but finding the right first project can be tricky. Ideally, the first project will be straightforward and not require expert knowledge of complex data. The goal is to have an initial success. The last thing you want is to have an analysis run and disseminated to the entire organization only to find out there is a major error. This is bad for the company since some people cannot forget something once they have seen it and will quote a bad number for months and it reflects badly on the analyst and department. Of course, you check the work of new hires so this will not happen to you.

As a new hire, do not feel bad about someone checking over your report. Even if you have been a programmer for years that does not mean you understand this data as well as you understand SAS. A second set of eyes can help

develop your reputation as someone who knows what they are doing. It is harder to build trust once it is broken than to keep it a high level. Make sure to ask questions. Just because a variable is labeled cost, do not assume it means cost of each item. It may be total cost and to get to a cost per item you need to use some divisor in another variable.

## **NOT ALL BOONDOGGLES**

Just saying the word conference can strike fear into many a manager. Do they just want a free trip to Las Vegas or will they actually learn something? You want to make sure you are spending the company's money wisely. Since you have attended SAS Global Forum before and know how great it is, you already know the benefits to your employees. Maybe you cannot accompany your employees this year and want to make sure they actually go to the presentations. Ask them to pick one paper of particular interest to them and then share what they have learned with the rest of the department. This could be in the form of a department meeting presentation or a summary sent out by email.

If you are the employee interested in attending the conference, make sure you can show how your attendance will benefit the organization. Sure, you are interested in professional development on a personal level but the company is interested on the organizational level. See if the conference has a justification document on its web site like the one for SAS Global Forum. If the conference is in a great location that you want to spend time visiting, ask if you can take a vacation day or two on either side of the conference and tell your boss you will cover the extra hotel costs. This shows your intent to sight see on your time as opposed to when sessions are in progress. Many times the airfare will cost the same and mileage will be no different. To make a stronger case, check the airfare both ways and print it out to help your cause. If there is no additional cost to the company, it should be less of a problem.

## **TRAINING IS NOT A DIRTY WORD**

Not all training is created equal. Once you have jumped the hurdles of topic and vendor the next one can be even higher. Does everyone attend the same class? If so, how can it be designed to not put those more advanced to sleep and not lose the neophytes at the same time? Can that even be done in one course?

Companies may try to save money by having training conducted at their facility. This can be good if everyone needs the same type and level of training. Travel costs are minimized and you may be able to get the course customized to fit your business. There are downsides to this. It is much too tempting for a manager to stop down to the training room to ask someone to check one quick thing for them. I have seen this turn in to the case of the missing trainee. They not only miss the content that you paid for but more than likely they end up spending time on something that could have waited.

On the other hand, what if there is a crisis and your key employee is five hundred miles away attending specialized training? Now you feel stuck unless there was some up front planning. You want to make sure each employee gets the training they need without feeling as if you are at risk with their absence. Maybe that feeling tells you a little more about your department need for cross training than it does about training in general.

If you want to boost your chances to attend training, it is very similar to justifying a conference. Be prepared to explain the benefit to the organization and make sure you did not list it as a skill you already had on your resume when you were hired. That would put you in an awkward situation. Very awkward.

See if you can arrange to have system access while you are traveling. Ideally, you will have a company laptop that can function as if you were at your desk with a Wi-Fi internet or cellular connection. This can provide comfort to your manager in case there is an emergency. Maybe you can offer to check email and voice mail during breaks and lunch to make sure nothing is needed. Train a co-worker to run your weekly reports for you or better yet, schedule them with SAS. Nothing better than having your work done automatically while you are at training. Saves the rush to catch up when you return.

## **CRYPTIC CODE DOES NOT EQUAL JOB SECURITY**

Have you ever looked at some code and wondered if the programmer knew what they were doing? Have you ever been that programmer? Writing complex code because you can does not demonstrate your value much less indispensability to an organization. Organizations can take steps to prevent directories full of code in different shapes. Art Carpenter has a wonderful paper that illustrates this point very nicely. Find the link in the references section.

Some companies require a very rigid program format and review process. Programs must have a set comment block at the top and all changes notated and versioned. This can make for some very slow programming but it can also avoid costly mistakes. If you are documenting your program in support of a submission to the FDA for the approval of a new drug this process is an absolute must. If you need to generate the number of students enrolled in Math 101 for the fall semester, this would be overkill. Set the requirement based on the importance of the decision to be made and the cost of an error. Requiring the same standard for every program is typically not necessary.

Store programs in a common area. This way you can review programs to see how they look and if they are pulling the correct data. If you cannot follow it, that is a red flag. Employees may balk at putting their programs on a server

but it is a good practice. I think everyone has lost files due to the crash of a hard drive or dropped laptop. Servers are typically backed up regularly so any loss would be minimal. See what can be done to limit write access to each employee's folder on the file share. That may make them more comfortable that someone will not go in and erase their programs. It will allow others to view programs, which is a good thing. Why recreate the wheel when you can share?

If you are the one needing to borrow a program, provide the courtesy to the original author that you will be borrowing some code and give credit in your comments. This can also save you a headache if you learn that the program does not do what you thought it did.

Now, what can you do as a programmer to show your worth? Make sure your programs are easily read and well commented. Add notes where things get complicated. Is there a reason for a full outer join? What need does it fulfill? It does not have to be a dissertation length explanation but just enough to make it clear to another reader or to yourself when you look at the program a year from now and are trying to figure out why you did that.

If your thought process is along the lines of job security when you write code think of it from the perspective of your manager when you being considered for a promotion or looking for a reference for another job. Will they consider your artful code a sign of strength or weakness? Will you have code to supply a hiring manager to evaluate?

## **OK, MONEY IS PART OF IT**

Since assets by definition have value, your SAS assets should be treated the same way. Deciding on the compensation package at the beginning is only part of it. Boxing in a professional with no desire to move into management will drive people away just as fast as a poor salary. Many companies tend to omit a professional growth path for non-management positions. One company with such a path calls it the "technical ladder." If you do not want to climb the "management ladder," there is still something to climb. The positions by rung are comparable up to the senior director position on the management side in terms of level and salary went even a little further.

Some skills just cannot be taught and are worth paying for. Thinking logically, having a deep understanding of the business, or possessing a wide range of tech skills in addition to SAS is a huge benefit to your company. Self-motivation and a willingness to learn are for many people traits in their personality. These are people you want to nurture and retain. Proactively reward strong performance and skills. Make an offer that is not insulting to the skill level of the candidate. Do what is in your power to reward those that should be rewarded. Be candid when times are tough and financial compensation is just not an option. Let people know they are valued and show them the money when you can. Do your best to avoid the "I'm going to turn in my notice so you'll offer me more money" syndrome in your employees. Do not let them think that is the only way to receive just compensation.

Jumping ship just for more money may seem like a good idea. Or is it? Sure, you can find a company that pays more but will you be happy? You could end up jumping in to a whole big can of worms. You'll be low man on the totem pole which could mean less interesting projects, the company could be unstable and end up defunct in six months, or your new boss could be what is unstable. Think of what you like in your current position. Is the only thing that makes you unhappy your salary? If so, do some research on what others with comparable education and experience make in similar industries. There are many published salary surveys out there. The American Statistical Society conducts several, [Information Week](#) magazine has one for technology professionals, and even a web search on "SAS Salary Survey" turns up a wide assortment of results.

Once you have some data, be honest with yourself and where you stand in comparison to your peers. Are you truly underpaid? Sure, everyone would like to make more money but it does not grow on trees. If your research reveals that you are below the norm, take that information to your boss and propose a value for your contribution. Having some objective evidence can only help your case. Storming in and complaining that you make less than everyone in the department will not get you very far. Have a candid conversation. If you are candid and unemotional, your boss may be as well. Be prepared to accept the reality that there are not any additional funds available now but trust your boss if he says he will be able to do something at review time. One caveat, if you have heard this before and it has been unfulfilled with lacking explanation, you have another issue on your hands.

## **THE ANTICIPATED PERFORMANCE REVIEW**

Don't dread the annual review. Look forward to it. Maybe even add a mid-year update. Use the performance review to discuss what has been done but also what can be done. Suggest new ideas and types of projects. Integrate your new skills from the last SAS Global Forum into a new project. Remember, professional development is not just about SAS skills. What about communication skills, getting more (or less) involved with a particular initiative, taking on the management of an intern, conducting training, mentoring, volunteering? This is the chance to add value and satisfaction to the job.

Managers tend to dislike giving performance appraisals. They are easy when performance is good and things are going well. Not so easy when performance has been low and consistent errors are in everything produced. Remember, there was a reason you hired this person. Has something gone wrong or changed? If this is a recent problem, it may be caused by something other than lack of skill. The cause is not as important as discussing the quality of the work. Do not wait until review time if something goes wrong. Do you really want eight months of

sending analyses back for rework when a thirty-minute conversation could correct it right now? Regular feedback is much more welcome than hearing that you have been messing up for a year and are not going to get a raise from the employee's point of view.

Please do not be the manager that rates every employee at an outstanding 5 out of 5 for every criterion. This does not show your skill as a manager and your extraordinary ability to spot talent. This type of review is worthless to the company and the employee. Start from the perspective of the middle. Are they better or do they need some improvement. This will also be documentation in the unfortunate event that an employee needs to be let go. You do not want to explain on the stand to the court how even though the performance appraisals show outstanding performance it really was not the case.

Use reasonable scores in reviews. A one to five Likert scale is simple to interpret but what if your company uses a 1 to 100 hundred scale. Try to round to the tens unless you can truly explain the difference in what it takes to turn an eighty-six into an eighty-seven. If your scale uses tenths, use a half when truly between two values. Again, discriminating between 3.3 and 3.4 may be impossible. This will also allow you to clearly state what it takes to move from an 80 to a 90. There should be discrete measures to make the move. You need to let employees know what they can do to make that move so their performance does not seem like an arbitrary number.

Once you have discussed performance, there are always goals to set and review. Sometimes goals just end up being tasks that are part of the job. Running a weekly report is not necessarily something to aspire to but rather an expectation. There is a difference. Large projects or conversions can certainly be a goal as long as the employee has a part to play. If they are not involved and will be penalized if the goal is not met, it will engender a lot of ill will. Migrating to a new server, upgrading to a new version of SAS, developing a data dictionary, and other tasks along these lines may be smart choices. Make sure to include the specific tasks and milestones so it will be easy to determine if the goal was met or not. Arguing about whether or not an ambiguous goal was met is a big waste of time.

Include a professional development goal. It does not have to be something expensive but should be of interest to the employee. Maybe they want to learn how to speak better in public. See if your company has any books, videos, or access to online or live training that could be provided. Find something mutually agreeable that will show a benefit and is measurable. Agreeing to get better at SAS programming is too vague, but earning the Base SAS Certification is a much better choice.

Being on the receiving end of a performance review can seem like a lecture from your boss. Do not let it turn in to one. Keep the lines of communication open all year long. You do not want to hear that something has been wrong for eight months as much as your supervisor does not want to tell you. Fixing a problem ahead of time keeps it off the record.

Know what the numbers mean and what you need to do to move to the next level before leaving the meeting. Do you need the Advanced SAS Certification to get a 5 or can you demonstrate the skill another way? Knowing what you need to accomplish is half the battle. If you disagree with a part of the evaluation, speak up. Ask why the rating was set where it was. If it was set based on misinformation, provide the correct information. The evaluation is not written in stone and now is the best time to set the record straight.

Be active in setting your goals. This is a good chance to add things that can move you up in the appraisal scale. Make sure the goal is reasonable and has a benefit to the company. They are more than likely not going to send you to get your Ph.D. in Yoga regardless of your interest. Some goals will be given to you whether you want them or not and that is something we all have to live with. Try to make the other goals relevant to you and your career development.

## CONCLUSION

SAS assets have value the same way your SAS Software does. There are many parallels:

- The need to make the right choice up front
- Completing a successful installation (also known as orientation and the first few weeks)
- Learning the ropes
- Documentation
- Well spent money
- Reviewing performance and planning for the future

Remember that each role has responsibilities. Neither can sit back passively and just hope for the best. By doing your part you can leverage the best in your employees and find more satisfaction in your job.

## REFERENCES

SAS Global Certified Professional Directory: <http://support.sas.com/certify/directory/index.hsqli>

For additional information on interviewing SAS Programmers:

"Assessing SAS® Skill Level during the Interviewing Process" by Jenine Milum at <http://www2.sas.com/proceedings/forum2007/126-2007.pdf>

"Evaluating Sample Code for an Interview," by Stephanie R. Thompson at <http://www.nesug.org/proceedings/nesug07/as/as10.pdf>

SAS Global Forum benefits document: <http://support.sas.com/events/sasglobalforum/2011/images/justification.pdf>

"Programming for Job Security: Maximize Your Indispensability - Become a Specialist," by Art Carpenter at <http://www.caloxy.com/papers/80JobSecuritySpecialist.pdf>

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