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My First Job Dos-and-Don'ts: A Survival Guide for Your First Statistical Programming Job in the Industry

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ABSTRACT

Are you a statistical programmer who's new to the industry? Have no fear: some useful tips and tricks are here! After working a little over a year for a CRO, we wanted to share some things we've learned along the way, as well as include some personal anecdotes of our successes and failures. We hope that these ideas will be a surefire way to help you keep your first job and wow your boss.

Throughout our presentation, we will discuss how to take charge of your own career, program more efficiently, and stay organized in the workplace. Although many of these skills can be applied to any first job, our focus is to help new industry programmers. These suggestions may seem very simple and straightforward, but building good habits from the beginning is a great way to get your career off to a wonderful start.

INTRODUCTION

There are definitely many ways one can experience mishaps after obtaining their first job. In this paper, we will focus on some ideas you can put into practice to avoid some of the embarrassing mistakes we and many others have made along the way. Hopefully, by sharing our successes and failures, you will realize that everyone is human and that we all make mistakes. The most important thing to keep in mind is to learn from them and not to beat yourself up – that's your supervisor's job!

CAREER

No matter what position you start out in, you always want to keep your overall career path in mind. The idea here is to gain as much experience as you can, while continually adding as many skills as possible to your professional arsenal. By doing so, you will become promotable and advance more rapidly. Based on our experience, we would like to share some guidelines that we think will be of value to you as you start out in the industry.

TAKE CHARGE

No one is more responsible for your career advancement than you. People can guide you and give you helpful advice, but YOU are the one that needs to apply the information and make it happen. Take charge of your own career path by always being on the lookout for ways to expand your knowledge and improve your skillset. This can be done by taking advantage of training online, company and internal training, and attending conferences and seminars like those offered by PharmaSUG, PhUSE, and your local SAS® Users Group. You can also challenge yourself at work by volunteering to take on more demanding tasks. Try not to get too comfortable or complacent and keep moving forward because if you just sit in the middle of the road, you are eventually going to get run over.

BE MOTIVATED AND PROACTIVE

Push yourself and aim to become independent and confident in your work. Instead of waiting for your next assignment or being told what to do, be proactive by asking for work, volunteering for assignments, or making suggestions on how things can be improved. Also, pay close attention to how the studies you are involved in are carried out, and identify best practices you can implement in the future. Always be thinking about where you see yourself in a year's time. Set a goal and strive to do everything that is required of you for the next position. By doing this, you'll not only make your boss look good, but he or she will have plenty of reasons to promote you.

TRY AND AIM HIGH

Always do your best and produce high quality work with whatever assignment you are given. This cuts down on rework and saves the department and company both time and money – something your manager is sure to notice.

SPEAK UP

Never hesitate to speak up and contribute when you think something could be done more efficiently or when something doesn't look quite right. The idea here is not to be a troublemaker or to complain, but to contribute in the

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spirit of improving and making things better. It's always a good idea to be prepared with a solution or two, so it shows that you're focused on how to solve the problem rather than complaining, which is unproductive. It's always a good idea not to step on anyone's toes, but there was an instance where one of us mentioned to our manager that it didn't look like the project team would be able to meet an upcoming deadline based on the progress that was made in the previous week. The manager was very appreciative and spoke with the project lead. The result was they ended up getting more resources to successfully meet the deadline that was quickly approaching.

PROGRAMMING

Even though you've had practice in class working with "pretty" datasets where everything works out without a glitch and despite having all the right certifications, you still may not always be prepared for how unique and unwieldy datasets can be and the best ways to tackle data manipulation for your displays. It may seem a bit daunting at first when you step up to the plate, but there are a few things you can do to make the process less painful when you finally take a swing at it.

ASK QUESTIONS

Never be afraid to ask questions if you don't understand an issue or if something isn't clear. It's always better to be certain rather than second guess and risk making a bigger mistake. Find someone, like a more experienced programmer, who is approachable and ask away. If you are a bit shy, talk with your manager about the possibility of being assigned a mentor to help build your confidence and steer you in the right direction. We are all guilty of being stuck and waiting until the absolute last minute to ask for help out of sheer desperation. Even though struggling can be beneficial, it is a part of how we learn to program. After giving it an honest effort, it is always smart to know when to surrender and ask for help, especially if there is a deadline looming.

THE INTERNET IS YOUR FRIEND

The internet is one of the most valuable tools available to you. Don't be afraid to use a search engine to find good explanations and examples, because it can help you find resources to decipher error messages or warnings, figure out how to write a macro, and provide an explanation for a particular procedure. A great place to start would be the SAS® user support webpage, SUGI, where you can get acquainted with some reliable sources. Often, a search engine will navigate you directly to some SAS® documentation.

DON'T REINVENT THE WHEEL

Starting a program from scratch can waste time and be very exhausting. Try not to reinvent the wheel if you don't have to. If a program already exists, modifying it will sometimes be the best way to go. Also, if you have a lot of tables and QC reviews to do and are facing some tight deadlines, it's always a good idea to check first to see if some or all of the tables are similar to each other. This may drastically reduce your review time and prevent a lot of unnecessary work.

BE A GOOD NEIGHBOR

Try to make life on the job as easy as you can for yourself and others. One helpful thing you can do is to make sure to insert comments throughout your program as you work, so you or anyone else who needs to modify your code in the future will have a better idea of what they are looking at. Adding comments throughout your code can save you a lot of time and trouble by not having to get reacquainted with your program after returning to work from holiday. Another thing to remember is to save your work often. Please don't learn the hard way because sometimes there are glitches in the system and by saving often you can prevent a lot of heartache by not having to recreate work that has been lost. Finally, you may want to consider creating a cheat sheet with screen shots or a folder for important information on how to code, how to access a certain system, how to carry out a certain task, etc. This will save you time by not having to continually look up the same information over and over. For example, you could add in something like how to use an ARRAY to populate the remaining blank data points in a display with zeros if required, how to carry out PROC COMPARE for validation purposes, or how to use COMPRESS to discover whether not there is a true mismatch between the base and the compare datasets.

ORGANIZATION

Being organized on the job is one of the best investments of time you can make. Psychologists tell us that it takes about 28 days to create a new habit, so don't be too hard on yourself. Just get started and pretty soon being well organized will become second nature and a part of your daily routine. Here are some tips we've found to be especially useful.

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THINGS TO DO ON A DAILY BASIS

Having a regular routine is a great way to organize your work day and to make each day as productive as possible. There are a few things, which if done every day, can make your days and weeks run a lot smoother and eliminate a lot of needless stress. Below are some ways we have been able to stay organized. It would be wise to try to turn these suggestions into daily habits.

To get your day off to a great start, work through your e-mails first thing and organize them by creating folders and sub-folders. Try not to let unread e-mails accumulate because it can add a lot of unwanted stress to your day. After doing so, checking your calendar would be a logical next step. After reviewing these, update your to-do list and start working on tasks in order of importance. Before you leave for the day, make sure you have updated all trackers for any projects you are on. Also, it is very important to fill out your timesheet on a daily basis rather than at the end of the week when you can't remember things. Once again, check your e-mail and calendar to make note of possible action items for the next day. We find this is especially helpful after returning from a long weekend or vacation. Lastly, if you happen to be traveling on company business, you want to make sure you keep all your receipts to turn in with your expense reports. Sometimes, the payroll office will not pay you for expenses if you cannot provide a receipt. Keeping them in order and in the same place will help you ensure that you get fully reimbursed.

Some other useful tips include, maintaining your to-do list in a physical notebook or digital notepad, taking detailed notes during meetings, and adding automatic notifications for important dates to your calendar as soon you can.

In summary:

- Check your e-mail and your calendar first thing in the morning and periodically throughout the day
- Review and update your to-do list, as needed
- Perform daily tasks identified on your to-do list in the order of priority
- Update any trackers
- Fill in your time sheet at the end of the day
- Make a final check of your e-mail and your calendar before you leave for the day

SOFT-SKILLS

Often times your level of success is dictated not only by your technical skills, but also by your interpersonal skills. There are many different types of personalities in the workplace. One of the keys to success to being a stellar programmer is to be approachable and having great communication skills.

LOOK AND ACT THE PART

Always look and conduct yourself in a professional manner when at work. For example, no texting, no nodding off during meetings (grab a coffee or tea to stay alert), and always dress appropriately. Your appearance and behavior can play a big part when it comes to being considered for a promotion or management position.

CLEAR COMMUNICATION

The ability to communicate clearly and concisely is a key skill in helping you advance in your career. Be clear in both your written and verbal communications - let people know exactly what you need and want. Keep in mind that everyone is very busy, so try to keep all communications (especially e-mails) brief and to the point.

BE FRIENDLY, COURTEOUS, AND KIND

This is not only part of the Boy Scout Code, but also very good advice to follow when dealing with managers and co-workers. Always have the reputation of being someone who is approachable and nice to work with.

GET BY WITH A LITTLE HELP FROM YOUR FRIENDS

Networking, though helping others, can be very beneficial in the long run. For example, we were encouraged to ask our managers if we could submit and present at PharmaSUG this year because of a suggestion made by a colleague. Working together as a team is often the best approach to meeting deadlines, instead of everyone struggling on their own. Don't be afraid to ask for work-from-home days, especially when there is a tight deadline and there is no time to

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get ready and go to the office, fighting traffic, or log back into everything needed. There was an occasion where one of us had to stay home for three days straight and work with a more experienced programmer to successfully meet a deadline. An added benefit of helping others is that it reinforces your learning, knowledge, and understanding.

LEADERSHIP

Leadership can be defined in many ways like overseeing a single or several projects or teams, leading an initiative, or serving as a personal mentor. This is definitely a skill you want to develop if you are seeking out a managerial and leadership type of position.

CONCLUSION

Even though there no guarantees for success in all situations, including a first-time programming position, there are definitely some habits and attitudes that can be adopted that will greatly increase the chances for a positive first experience. It is our hope that the ideas we have shared will help first-time programmers to not only survive, but thrive in their first position in the industry.

RECOMMENDED READING

- Base SAS® Procedures Guide
- SAS® For Dummies®

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