

## **Transition from “hands-on” statistical programmer to leader of a team of role based statistical programmers. Tools and tips to help you succeed.**

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### **ABSTRACT**

This paper is inspired by Jim Grudzinski's PharmaSUG 2012 presentation titled “Managing a Blended Programming Staff of Permanent Employees and Contingent Workers”. However, it also shares my personal experiences and perspectives as team leader (i.e. the permanent employee), being responsible for managing projects and coordinating workers in a “role based” sourcing model (i.e. the contingent worker). I will describe in detail what I consider four basic steps: attitude, know your team, adequate prioritization and track, as well as recommendations, tips, and my opinions in leading and coordinating role based statistical programmers that have helped me successfully execute and finish projects that were both planned and unplanned, simple and complex. This presentation is not meant to be a seminar on project management nor does it represent the views and policies of Eli Lilly or its affiliates, it rather reflects my personal opinion on how to successfully transition from permanent staff doing “hands-on”/“heads-down” work to doing project and resource management while leading a team of role based statistical programmers.

### **INTRODUCTION**

The pharmaceutical industry continues to re-invent itself. To a greater extent it is shifting the tasks and personnel from its direct management onto contract research organizations (CROs) and third party organizations (TPOs). The words of the day now are “cost reduction”, “cost savings”, “streamlining” and “outsourcing”. According to R. Mouly Satyavarapu there are two commonly used CRO outsourcing models for statistical programmers. The first one is referred to as “Deliverable Based Model” or “Fully Outsourced Model”, this model is used when the scope of the work is well defined. A sponsor company would let the CRO or TPO control and manage most, if not all aspects of the project, which may include using their own systems and programming environments and their own standard operating procedures (SOPs). The second type of model is referred to as “Full-Time Equivalent (FTE) Time and Materials Model”. It is also known as “Role Based Model”. Here the sponsor company contracts out specific parts of a project where the scope of work is not so well defined and where it can change over time. The CRO or TPO personnel usually follows systems and environments set up by the sponsor company as well as abide by the sponsor company's SOPs, just as a sponsor's employee would. However, the CRO or TPO personnel are not part of the permanent staff but are primarily contingent workers under a limited time contract. In both outsourcing models, the sponsor company keeps ultimate responsibility for the results of the project.

In the world of statistical programming within the pharmaceutical industry, employees have also shifted roles, especially for the permanent staff that was originally hired to do statistical programming “hands-on” or “heads-down”. After major “re-organizations” and “re-structuring” within pharmaceutical companies, the remaining permanent staff is now responsible for managing and coordinating the requests for statistical analysis of clinical data, understanding ongoing and upcoming projects, planning and forecasting resource needs, tracking projects, evaluating workload and coordinating an increasing number of role based workers. Permanent employees are also expected to possess strong statistical and analytical skills, have in-depth knowledge about the molecules they support and their data, contribute to process improvements to increase efficiencies, and ensure compliance with company policies and procedures. In addition, they are expected to be team players and complete projects of quality, with speed and in a timely manner.

It seems that many of the people who have shifted from hands-on roles to these new management roles are struggling to fulfill the expectations described above. Based on personal experience I believe that there could be multiple causes for such struggle. First, these people may lack the training and experience needed in project and resource management. They may have degrees in computer science, engineering, mathematics or statistics. But their under graduate or graduate training, in most cases, did not include subjects on project management and other important “soft” skills necessary for the new roles such as communication (oral and in writing), negotiating, planning, emotional intelligence, and conflict resolution. Since they may have been hands-on programmers for a considerable time before the switch, they may not have had an opportunity to develop these skills gradually on the job. Second, they may have difficulty accepting and adapting to the new environment. Statistical programmers are more inclined to analytical thinking and, in general, have a more “introvert” personality. By introvert I refer to an individual who is more comfortable working on his or her own in a focused and guided manner, rather than a synonym for shy. Switching to a role that demands a greater level of leadership and social interaction could be challenging for these individuals. Third, and to a lesser extent, I think that cultural background and idiosyncrasies can be a contributing factor to the struggle in question. In the globalization era, it is very common to have professional interactions with

people from diverse nationalities. A misuse of the English language or even having an accent can be obstacles in this kind of interactions. Finally, it could simply be that they enjoy being a programmer more than being in a coordinator role. In his paper, Jim Grudzinski mentions that upper management can also be a cause if they do not provide adequate training, tools and support to help their staff succeed. He also emphasizes “the increased stress level this new role can place on your permanent staff”.

## **BACKGROUND**

I will now describe the background I was exposed to which will serve as framework for the content of this paper. When I first started working in the pharmaceutical industry 12 years ago, I was originally hired to work as a hands-on statistical programmer supporting new drug applications (NDAs) under the direction of a project statistician. In general the statistician would be responsible for the study designs, protocols and statistical analysis plans (SAP) while I would be responsible for the data and for implementing the SAP via statistical programming using SAS®. After spending a few years away from the statistics world, I returned to it when the environment had significantly changed, both in the industry and in my company. The industry’s environment had become more challenging with tougher regulations, fewer approved submissions and more scrutiny of those under review. In order to streamline costs, my company, like many others, began outsourcing an increasing number of projects; and work that was usually done in-house was now being given to CROs. Many of the colleagues I knew had moved out to work for CROs or for other departments. I found that my role had significantly changed and that I was now the leader of a team of role based statistical programmers. The new job had new responsibilities and expectations and there was a certain level of anxiety associated with it. I was assigned to support a new compound I was unfamiliar with. I had new colleagues, both role based and permanent. My new team was dispersed all over North America, with people working or telecommuting from different states in the US and with me being located in Canada. Although I had led teams before, this was my first time being officially a team leader. Furthermore, I had almost no training and very little experience in project management.

The experiences and learning I have gone through in my new role have helped me improve my own management skills, create in most cases healthy and successful work relationships within and outside my team, and successfully execute and complete diverse projects which resulted in successful performance evaluations at the end of the year. If the reader has found him or herself in a similar situation and is struggling in a similar role, my hope is that he or she will find the subsequent sections helpful. What follows are some basic steps and recommendations I have incorporated in my role which I feel have served me well when facing the professional obstacles described above.

## **BASIC STEPS**

### **FIRST: ATTITUDE**

My first step was to embrace my new role and the initial frustrations that come with it. To me, these frustrations are part of the process. This is the part that many of us struggle with and, let’s face it, complain about. However, it is evident that this organizational change will stay with us, at least in the foreseeable future. As a result I made a conscious decision to embrace this change and make it work for me and subsequently for the company. Therefore, a change in attitude is imperative if one is to succeed in this new environment and in this role. Resisting a change in attitude may be a recipe for failure. Several of my colleagues have shared the following expression: “If you are not happy with what you do, you cannot do it right”. For me, this statement rings true and I believe that if you find yourself in such a position, you should probably search for other opportunities where you can thrive, be happier, and succeed.

### **SECOND: KNOW YOUR TEAM**

My second step was to get to know my team members and to get to know them well. This step was applied to both the CRO personnel as well as the permanent staff that works at my company. As it is often the case, not being located in the same office, or in the same region, or even in the same time zone certainly was challenging. I have found that face to face introductions are always the best way to meet with a team for the first time. Matching faces to names had a rather important impact on the work relationships I have created. In my opinion, meeting in person makes all those involved more accountable for their actions and behavior. I would strongly recommend booking a trip to meet your team in person if you can. If not, try using other methods such as videoconferences or at least a direct telephone call. During this first one-on-one meeting, introduce yourself. Talk about your experience with your company and your areas of expertise. Also talk about your experience before joining your company and your education. If time allows, talk more about yourself: Where you are from, where you were born and raised, where you currently live, your hobbies and interests outside work. Ask open ended questions, and try to retrieve the same type of information from the other person. Keep a written record of this first interaction; you might need to get back to it at a later time. It is in your interest to get acquainted with their areas of expertise and their years of expertise as much as possible. This will greatly help you understand your team’s strengths and weaknesses and allow you to assign the right project to the right person. I will talk about assigning them at the right time next.

### **THIRD: ADEQUATE PRIORITIZATION**

The next step did not occur sequentially after the one I described above. As a matter of fact, it took me some time to get it right. But my recommendation is that you learn how to do this as soon as possible. My third step would be to prioritize each project adequately.

It is important to realize that your team of role based statistical programmers is a service provider. Your customers are mostly internal. They can be other statisticians or colleagues from other departments such as the Medical, Regulatory, Marketing, Scientific Communications or Sales Departments. They can also be external such as thought leaders. But regardless of this, it seems to me that every customer who submits a programming request, believes or feels that they are your only customer and that his or her project is the only one you are working on and hence should be done quickly and with the utmost priority. The reality is that you can have a large number of projects going on simultaneously competing for resources. Additionally not all projects are equal in importance and hence do not have the same priority. As a result it is crucial that you are able to identify what kind of priority each project has. Remember that the role based outsourcing model is characterized by the fact that the scope of work is not clearly defined and can change over time, therefore priorities can change too.

As a team leader working permanently for a sponsor and to help you prioritize adequately you should know and understand your company's business strategy. Since this can be constantly changing, you need to be aware of each molecule's position within your company's pipeline at all times; at least for the molecules supported by your team. For example, it should be informative to you to know which molecules provide the highest portion of total revenue to your company, which molecules are at the end of their patent life, and which molecules are just about to be launched into the market. You should know which molecules are in the “critical path” and which are not. Also, you have to understand the nature of the projects assigned to you and your team. Regulatory questions are usually the highest of priorities. Delaying a regulatory response can look suspicious in the eyes of a regulator. Requests from customers, the Marketing Department or clinical investigators are important, but they usually fall at the bottom of the list.

However, apart from understanding “the business” and the nature of each project, what was most helpful to me in prioritizing adequately was identifying “who is in charge”. This means identifying that person of authority within your statistics department or therapeutic area in your company with the overall vision and understanding of the importance of the portfolio you work for. This person can be your Supervisor, your Lead Project Statistician or your Medical Director and can provide you with additional details, rationale and updated information related to the importance of each project. Having contacted, partnered and asked this person to provide me with a clear and precise prioritization of the different projects that came to my plate was a determinant factor in succeeding in my new role.

You have limited resources to work on what seems an unlimited number of projects. Your team cannot work on all of them at the same time. I do not believe in multi-tasking. But once you have understood and obtained a clear indication of the priority of the projects your team is responsible for, the task of assigning your role based statistical programmers to each one of these projects becomes much easier. This will allow you to assign them at the right time. Obviously, the highest priority project is the one for you to work on first. Sometimes the projects with the lowest priorities will suffer, but this should be acceptable because the impact of missing a timeline or even not completing a low priority project should be minimal.

### **FOURTH: ORGANIZE AND TRACK**

The fourth step is to set up and use a system to organize, register, track, monitor, update, and deliver the different projects that come to your plate. Trying to keep track of these via emails or your notebook is a bad idea. Data is one of the biggest assets a pharmaceutical company has. It can be very frustrating and embarrassing when a company lacks the ability to rapidly track and find the sources of any data they make public. It is very important to be able to track quickly and efficiently every single number your company, and more specifically, your team produces. There can be multiple ways and tools that you can use, such as a MS® Excel® spreadsheet, a MS Project® file or a web based application. But regardless of the tool you use, I would recommend to keep a record of the following information at a minimum: title of the project or programming request, assigned priority (by the person “in charge”), who requested it, who will work on it (usually this will be pairs of people: a main programmer and his or her peer reviewer for quality control; but for bigger projects you may have your whole team working on it), an identification number for easy tracking, when the request was submitted, when the output is needed in a production environment, when the request was started, when the request was finished, location of programming requirements, location of programs and output. This information will be very useful for creating metrics and also for explaining to your management if any problems or delays arise in the delivery of projects. I would also recommend you ensure that your tool and the information contained in it are accessible to all of your team members as well as all of your customers so that they can check the status of a request at any given moment. It is also a very good idea to back-up this information on a regular basis. You could further develop your system to allow your customers to enter new requests by themselves and send automatic notifications to your team so that they are made aware that new work is coming to them.

These basic four steps: attitude, know your team, prioritize adequately, organize and track, will certainly put you on the right path to successfully manage your team of role based statistical programmers.

## **TACTICS AND TIPS, EXPERIENCES AND OPINIONS**

Allow me to share some tactics, tips, experiences and opinions that have helped me succeed in my role. Most of these are personal perspectives and are not intended to be “golden rules” or text-book recommendations nor do they reflect the views, practices or procedures of Eli Lilly and Company. They simply represent what in my opinion can help you navigate in what sometimes can be a very intense, stressful and confusing job. I will include my personal opinions on what can be done to improve.

### **COMMUNICATION, COMMUNICATION, COMMUNICATION**

Native and non-native English speakers alike struggle with both written and oral communication skills. Poor communication skills can be an obstacle to your success as coordinator of people and projects. But regardless of your background, you should make the improvement of your communication skills one of your highest priorities in your new role. Begin with improving the oral presentation skills, then move onto your writing skills. Make the effort of using grammar, vocabulary, punctuation and orthography correctly. This will help you avoid confusions and save lots of time. This can be an ongoing process.

While continuously striving to improve your written and oral presentation skills, you should also work on determining the best methods and ways to communicate with your team and your customers. Some customers will want you to keep them updated daily. Others have so much going on that they just need you to communicate with them if necessary, or when the programming request has been completed. In the new environment, I have noticed that people are getting more swamped with emails and have very little time to go through all of them, especially if they are in upper management roles such as Director or Vice President. I have consistently received the feedback that these people need to be informed on an as-needed basis. Examples of important information to share are: clarification of programming specifications, problems with the project and obstacles, impact on timelines, decisions made or to be made, changes in priorities, cancellations of projects or too many projects going on at a given time. Most people prefer to communicate via email, personally, I prefer the phone because it is a much faster way of communicating, coordinating and obtaining the answers I am looking for. You will have to understand and adapt to the communication style, needs and preferences of your team and act accordingly. For myself, I always ask to be copied in all e-mail communications related to all on-going projects and future ones. In this way I can determine quickly how to allocate the resources and make adjustments as projects progress. This also allows me to be on top of every project and know “the topic of the day”. The caveat is that reading all these emails can be very time consuming.

I would strongly recommend to loop-in your customers, your supervisor and upper management when problems arise that could jeopardize the delivery of a project or when the existence of conflicting priorities become obvious to you. Let them decide for you which projects you need to focus on first. If there are multiple stake holders, it is a good idea to gather them in the same meeting and let them discuss which project your team should focus on first. Each one of your role based statistical programmers has one head and a pair of hands. As I mentioned before, I personally do not believe in multi-tasking.

For bigger projects with a high priority, it is a good idea to set up regular meetings with team members to assess their progress and make sure that everything is on track. After each meeting it is good practice to prepare brief minutes highlighting the major agreements reached during the meeting as well as any follow up items and who is responsible for them. The frequency of the meetings can increase as the deadline for the delivery of the project approaches. Make these minutes accessible to every team member working on the project, even if they were present at the meetings, and store them in a location where everyone can review them if needed. If you want to be a better project coordinator, you will have to keep more information for future reference and for consistency.

### **KNOW THYSELF**

Learn all you can about emotional intelligence (EQ) and apply it. I have heard from more seasoned managers (other people who have been in management roles longer than me) that successful managers are those who understand and apply well their emotional intelligence. I am not an expert on the topic, but some of my personal recommendations are: do not send emails when you are upset or angry; do not panic or get upset when multiple new unplanned or unexpected projects come to your team; do not make a drama when projects do not work out the way you were hoping; do not panic when your most experienced role based programmer tells you he or she is leaving for another job; do not raise your voice or say hurtful words when tensions are high during an escalation meeting; do not point fingers when mistakes are made; do not immediately say “no” to new requests if you don’t have enough resources to work on them. Instead, take a step back and look at the situation from a higher perspective. If in a meeting or if you need to give an immediate response, use statements such as “this is an interesting problem, let me reflect on it, do further research and I will get back to you as soon as I can”. Remove yourself from the issue and

examine it as if you were an external observer. Take a few minutes, an hour, or a day to take a break from the problem and return to it when you are feeling calmer and more in control. If you don't know how to deal with a specific issue, ask for advice and help from your supervisor or from more experienced project managers on how to deal with the situation. Contact the person “in-charge” and ask him or her to re-assess the priorities and tell you what projects to work on first. Ask someone you trust to help you, remind you to keep your emotions in check and to modify your behaviors. Emotional Intelligence requires time to be built up, training and discipline.

Request feedback and adapt to it accordingly. Nobody is perfect and there is always room for improvement. Make it a habit to request feedback at least twice a year. A format that I use when requesting feedback is by asking three questions: What should I continue doing? What should I start doing? What should I stop doing? Although receiving positive feedback is always reassuring, I have found that the negative or “constructive” feedback is the one that allows for the greatest growth and better results in the end. You have to use all of your emotional intelligence in order to not take negative feedback personally and to read between the lines to learn what behaviors you need to change in order to improve your management skills and style. When receiving negative feedback, avoid justifying yourself or what you did. Instead, read or listen carefully and only speak to ask for additional details or for clarifications. Do not ask for feedback only from people you get along well with, or from projects that ended successfully. Ask for feedback from everyone you have interacted with and pay attention to the “constructive” feedback.

Be aware of your own prejudices and preconceptions with regards to other cultures outside your own and change them quickly. Be aware of your cultural background as well as that of your team and colleagues. Go back to the notes you took when you first introduced yourself to your team. Stereotyping someone by his or her culture is always a bad idea. In my years of interacting with people from different cultures and different backgrounds I have realized that regardless of this, each individual is unique and cannot be boxed into a specific cultural stereotype. Cultural diversity can also be very helpful and teach you new perspectives, points of view and practices. However, it is also true that there are certain traits that are specific to certain cultures. Latinos for example, are well known for being quite warm and friendly, sometimes too friendly. In Asian cultures, “not losing face” in front of other people is rather important. In Anglo Saxon cultures their direct approach when communicating can seem hard and cold at times. You will have to use your emotional intelligence to go past these first impressions and understand these cultural differences and traits in order to modify your own and guide your team better.

## **KNOW YOUR TEAM**

If you were unable to meet your team mates and colleagues in person or in a video conference, ask them to send you their picture and share yours with them. Even this small action helps to build your team's spirit and a sense of belonging. In all my previous interactions with vendors and CROs in other parts of the world, I have successfully obtained the pictures of all my colleagues, which in return has allowed me to have better working interactions and relationships that have lasted long after the original projects or their contracts were finalized.

Find what makes your team “tick” and reward them accordingly. A key element in your and your team's success is to understand what keeps them motivated and engaged. Everyone is different. Do not make the mistake of assuming that everyone has the same motivation as yours or as you think they have. From your first interaction with your team, you can begin understanding what really engages and motivates them and what does not. Some people may enjoy the peace and quiet of programming heads-down day in and day out. Other people would look forward to the challenge of doing complex statistical analysis, or complex programming, or work on new therapeutic areas they are not familiar with. Other people may prefer a more active and direct role in making the decisions that run a statistical analysis. Someone would perhaps prefer to become a leading author of a manuscript or take on more the role of project statistician. Other people would look forward to take on more responsibilities and become managers themselves someday. Knowing this will help you identify the right person for the right project. You can delegate whole projects to one of your role based programmers and let them take full control of it on your behalf, if you think they are ready for the task. Or you can assign the repetitive straight forward tasks to that programmer that enjoys doing heads-down programming. You could assign a challenging and delicate programming task to the programmer that enjoys working on something different every day. Offer adding their name as contributors to the deliverables they help create such as manuscripts, posters or presentations, if they agree to it. Moreover, you could share with your team presentations of project results and patient interviews that show the impact of the work they do on the lives of the patients that benefit from the medicines they help develop. Giving your team and yourself a sense of purpose can make a big difference on how engaged and how well a project is led to completion.

Avoid the trap of micro managing your team. Trust them and let them know that you trust them. But at the same time, do not abandon your team. Managing and coordinating resources requires a delicate balance between knowing when to intervene and when to let your team take control and ownership of their assigned task. Be perceptive and learn to let go.

Make a habit of having regular one-on-one meetings with your team. All you have to do at this time is stay quiet and listen carefully. Ask them what is in their minds. Take notes. This is a good opportunity to understand the challenges and difficulties your team encountered during the execution of a programming request. This will be useful in those

instances when a project might not have gone as well as planned. At the end of each interaction, ask them the question “Are you happy?” If they are not happy and they want to share with you, ask the reason why.

Make it a habit of having regular one-on-one meetings with your team’s supervisor(s). Most of the time, your team’s supervisors at the CROs do not know all the details of the challenges that your role based statistical programmers face every day. Because you have more close contact and direct interactions with them, you have a much better understanding of each one of your people’s strengths and weaknesses. Take this opportunity to provide feedback about your team and work together with their supervision to find ways to help them develop.

### **PROMOTE SHARING KNOWLEDGE**

Share any useful information and learning that will help your team do their jobs better or more efficiently. But be aware that you cannot always demand the same from them. This was very hard for me to understand and accept. In the previous environment, when there were more permanent than contingent employees, it was quite common to have sessions where everyone would have a chance to share knowledge with the rest of the team. But in the current environment, I became aware that for vendors and contractors sharing knowledge or trying to find ways to improve efficiencies is not necessarily part of the billable hours they can charge to the sponsor company. In this situation, you cannot expect them to spend time making presentations if they will not be able to charge the time back to the sponsor company. You have to keep in mind that the development of your team of role based statistical programmers is the responsibility of their parent company, not yours. In my opinion, this is one of the deficiencies and disadvantages of the role based sourcing model. I believe that sharing knowledge is crucial to strengthen your team’s capabilities. In my opinion, you should always allow the time spent sharing useful information and knowledge to become part of the billable hours of your contingent staff (if this is within your power and budget). In case this is denied to you, then you can share in as much as possible any learning and information that will help your team improve its efficiency and effectiveness, but be aware that this might have to be done in short meetings (30 minutes or less) or via other means such as email.

### **DEVELOP YOUR OWN MANAGEMENT SKILLS**

As previously mentioned, most of the permanent staff that transition to the new role do not have the necessary training in project management nor have they developed the necessary “soft” skills. Simply because permanent staff has been in a hands-on role for several years, does not mean that they automatically qualify to be in coordination and management roles. If your company has the resources and the vision to provide you with the necessary guidance and training, Kudos! to you and your company. But training is not always provided to help employees deal with their new responsibilities. The new environment in the pharmaceutical industry where cost-savings are now a necessity makes it harder for employees to get approval to attend courses, learn and develop new skills in project and resource management. In the end, it is up to the employee to develop and grow. In my experience, searching for all the help I could get inside and outside my organization provided good results. Help can be in the form of books on the subject, self-learning materials, coaching and mentoring from more experienced members in your organization, especially those who are in similar roles and have similar background, and even talking with friends and family. Incredibly, some of the best advice I have ever received on project and resource management came from friends outside my company. Although your organization might not approve your taking a 3 day course in project management, they may have internal resources available to you such as libraries and computer based training that can help you get started. Also, consider investing your own resources and money to take training courses. Consider obtaining the Project Management Professional (PMP) Certification from the Institute of Professional Management. Education is always a good investment.

Because you may be your team’s primary point of contact, it is very likely that you will be involved in escalation meetings and be asked to provide explanations to a customer on why a project was delayed or why there were mistakes. If the priorities are clear to you and if you are on top of the issues encountered by your team, you will be able to provide an answer and also to be fair to your team. In cases where the problems were your direct responsibility, own them and fix them. Never blame your team. (After all, it was you who assigned them to the project in the first place). Make people accountable but never point fingers. Particularly important is to NEVER humiliate a role based team member in group meetings. Instead, learn from the mistakes, re-train or have a shared learning session so that other team members are aware and the problem is fixed or mitigated. In the cases where the problem was not your responsibility due to lack of clarity, lack of prioritization, unclear programming specifications or rather aggressive timelines, stand up for your team and for yourself and make sure that your management is aware of these circumstances.

Just as you should ask for feedback, you should also give it. This can be a rather difficult thing to do sometimes. But realize that without feedback, there will be no learning or growth. Depending on the agreements between your CROs and your company, sometimes you will be able to provide feedback directly to your team. But if you find it hard to provide direct feedback to a member of your contingent staff then provide it to his or her supervisor. Remember to provide the positive feedback first and then give the “constructive feedback” with recommendations. If you are

charged with the task of providing feedback to all of your team, use a file to record the instances when a team member did a good job (or not so good), rather than keeping it to memory. At the time of performance evaluations, it will be easier to refer to such file and provide feedback than trying to remember and write something for each one of your team members from memory. In those cases where an individual is not working well for you or is not happy, then make the decision to transfer this individual from your team.

I would avoid making the mistake of assigning yourself to projects and work as a hands-on programmer. You are at risk of not taking good care of your coordinating responsibilities or delaying the project you assigned yourself to. Whenever I have made this mistake, it is usually the case that I spend all my core working hours dealing with communications, sending and responding to emails, reading information and coordinating my team. After all that is done, I can only start working on “my project” after 4 or 5 pm, when there is finally some peace and quiet around the “office” (i.e. no more emails or phone calls) only to stay up until 11 or 12 pm or to work over time during the weekends in order to catch up. You have to realize that you are in a different role now with different responsibilities and expectations and you have to learn to let go your anxieties about losing your technical edge or even forgetting how to program. Trust me. You will not. If you still feel the urge to do some hands-on programming or the need to continue developing your statistical skills, then my advice is to work on small projects that won’t consume a lot of your time and don’t have a high priority. At least in this way you will not impact or delay timelines if you get distracted in coordinating your team.

Sometimes, while coordinating projects and people I end the day feeling as if I had not done any “real” work. At least, not as “real” as when I was a hands-on programmer. This does not mean that I did not do anything all day. But if you want to counter this feeling, you can use the “90 minutes rule”. This means that for 90 minutes you set yourself a task that requires your full concentration and attention in order to get it completed or make good progress on it. During these 90 minutes you should try to avoid the temptation of looking at and answering emails or phone calls. This strategy will allow you to have a feeling of accomplishment at the end of each day.

“When you are at the 9<sup>th</sup> inning and all bases are full, do not hesitate to send your best batter to the plate”, to use a colloquial expression. This was also a hard lesson for me to learn. I had hoped I would have time to bring every one of my role based statistical programmers to a point where they could perform at the same level as the best of them. However, I quickly realized that it is not always the best thing to put less experienced people in charge of delicate or rather important projects just for the sake of allowing them to “gain experience” or to “learn”. I highly recommend that you always assign your best people to the projects that are most critical and have the highest priority. This might sound a bit unfair to your other role based programmers, but at the end of the day the most important thing when delivering a project is to deliver results that are accurate, reliable, and with high quality. Sometimes you cannot afford mistakes to happen.

A natural phenomenon that frequently arises is that customers will very quickly identify those individuals who are the best people on your team of role based statistical programmers. For that reason they may want to monopolize their support for the projects they want to complete. These dynamics often have as a result, if you are not careful, that smaller cells or sub-teams get created, and your customers become the manager of your team instead of you. With the help of your supervisor, manager or “person of authority”, you will have to make it clear to your customers that you are in charge of project and resource coordination, and that you will need their cooperation and understanding to let you assign the resources according to the needs of the projects you are responsible for. You will have to make it clear that you are in charge and that you are responsible.

In order to develop your skills, most likely you will have to move out of your comfort zone. Take these instances as learning opportunities. Push back when necessary, but do it smartly, with subtlety and respect. For example, when asked to do something that does not seem to add value to a project, challenge it by using words such as “help me understand the benefit of doing this or that”. Be courageous, develop assertiveness and do not be afraid. Sometimes, conflict with your customers or with your team will be unavoidable. In my opinion, it is in your benefit to learn to stand your ground and to support your team if you know you are right. This is why it is a good idea to document what happens with your projects and understand the challenges, so that you have proof that you are, as a matter of fact, right.

Finally, use the available technology to your advantage. Become an expert in the use of tools and systems that will allow you to coordinate, track, manage the workload and communicate with your team better. Examples are to master the use of internal communication systems such as instant messaging, teleconferencing, videoconferencing and web meeting, or to master the use of software such as MS Excel or MS Project.

## **TAKE GOOD CARE OF YOUR TEAM**

I would recommend taking genuine interest in the well-being of the members of your team. Make sure that their work load is healthy and manageable. Remind them to take breaks and vacation time. Do not promote “work holism”. It does not help you or any of the projects your team is responsible for to over exert themselves to a point where they get sick and cannot continue helping you.

Life events are inevitable and happen all the time. Good and bad. Show support and/or compassion when such events impact one of your team members. If they trust you and are willing to share, listen to them. Show support during events such as births, deaths or sickness of family members, divorces, graduations, going and moving children to university or college, to mention a few. These events will require time and the attention of the team member affected. All you can do is to ask to be informed of these events and their progress so that you can allocate the person to the project that will fit his or her situation. In these instances, try to assign the individual to those projects that exactly match his or her skill set and expertise, so that he or she can still be productive and need not worry about having to learn something new or having to pay extra care.

## **TAKE GOOD CARE OF YOURSELF**

Last but not least, take good care of yourself. When the work does not seem to go the way you expected and you feel down, stressed and depressed, go back to what matters most to you: your family, your spouse or significant other, your children, your friends, your religion or personal beliefs. Give yourself some compassion and re-affirm your qualities and your strengths. Learn from your mistakes, dust off, and try again. In these situations I like to turn to the so called Serenity Prayer by Reinhold Niebuhr, “God, grant me the serenity to accept the things I cannot change, the courage to change the things I can, and wisdom to know the difference”. Ask yourself the question “Am I happy?” be honest in your answer and act accordingly.

## **CONCLUSION**

Doing a transition from hands on statistical programmer to a leader of a team of role based statistical programmers can be a challenging task, particularly if you have never had the training, acquired nor developed the necessary skills to do such job. In this paper I have shared what I consider four basic steps (attitude, know your team, prioritize adequately, organize and track) as well as personal suggestions based on my own experience with the hope they will help people succeed in situations similar to the ones I had. The right attitude, communication, attention to detail, adequate documentation and, true care and consideration towards the people who get the job done are the minimum requirements that will help you succeed in the new role. Training in the subject of project and resource management is very desirable and should be pursued, but the actual experience on the job, and your own ability and willingness to adapt and modify behaviors and practices will be the determining factors for your success. In these challenging economic times, outsourcing seems to be a model that will continue to be used by the pharmaceutical industry for quite some time. In order to make it work and get the most out of it, sponsors have to realize the importance of developing their own staff’s “soft” skills. But in the end, it will be up to the permanent employees to adapt and act. Management is both a science and an art and, in my opinion, is like learning to draw or to play the piano. I firmly believe that it is not a matter of having or being born with the “talent”. It is, as a matter of fact, a mental process that requires training, discipline, perseverance and most importantly, the right attitude. As with any such activity, you should check from time to time if you really like doing it and enjoy it or if you would rather be doing something else.

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## **RECOMMENDED READING**

- The Rules of Management by Richard Templar.

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