

Leading a team when you are not the subject matter expert

Vijay Reddi, Roche Products Ltd., Welwyn Garden City, England

ABSTRACT

Pharmaceutical programming has a variety of areas which requires expert knowledge. As you progress in your career it becomes more difficult as a leader to be the subject matter expert (SME) in all these areas, but do you need to be the SME to be a successful leader? This paper describes the skills desired to lead a team when you are not the technical expert. Applicable to all levels ranging from leading studies to global initiatives. One case study presented in this paper describes the authors' own experiences, taking on the leadership role of a programming team tasked to harmonise PKS tools and processes. The author was not the PKS SME, but was chosen based on leadership skills to lead the team of PKS experts and deliver. A good leader has the ability to effectively communicate a vision to the team which empowers them to take a bold step forward.

INTRODUCTION

The first experience of leadership normally occurs when you are the technical expert in your field, for example the first leadership role for a statistical programmer would be as a lead programmer on a study. During your career progression if you choose to pursue a leadership track there will be opportunities or unforeseeable situations where you might have to lead projects when you are not the subject matter expert (SME). This experience can be daunting but there are certain skills which can be transferred from previous experiences which can help you and your team deliver successfully. Applying certain techniques such as situational leadership and question storming can help an individual to focus on skills which will help them. These techniques are described in more detail below.

In this paper techniques and skills will be described for a particular leadership situation when the leader is not the SME. A case study based on the author's experience will be to help illustrate how these techniques can be used and highlighting core skills needed. To provide context to help with the paper, the author became a business process leader of PKS in November 2012. During this time many challenges faced, and one of those challenges was the new lead had no practical programming experience of using PKS (the case study section below will describe PKS in more detail). Eight months later the team delivered and accomplished this together with great passion and team spirit. Throughout the journey the author had many new learning experiences on being a leader whilst not being the SME.

There are a wide range of challenges through your career that will test your leadership. As you progress in your career you become less the technical expert but learn new skills which allow you to lead at different levels within a company.

PKS CASE STUDY

In this paper a case study is described on the author's experience on leading a global statistical programming team within the PKS initiative. The initiative was to roll out a single set of PKS tools and processes.

The PKS initiative focused on PK\PD analysis. PK is pharmacokinetics and is the field of "what the body does to the drug"¹. PD is pharmacodynamics and is the field of "what the drug does to the body"¹. Phoenix WinNonlin is a tool used by pharmacologist to conduct PK\PD modelling to investigate the interaction of the body and the drug. PKS stands for Pharsight Knowledgebase Server² which is a platform which allows our server to connect to Phoenix WinNonlin². Statistical programmers prepare the data for PK analysis and upload to Phoenix WinNonlin from the company server to PKS server using Informatics tools. In this environment the Pharmacologists performs PK/PD analysis on the data. The PK endpoints (such as Cmax) are extracted from PKS back to the company server ready for the statistical programmer to create PK TLGs.

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The first challenge was to have agreement across the company. The current company is a result of two companies merging together and both companies had separate PKS tools and processes. In addition the current company is split into three parts, which includes two early developments (known as pRED and gRED) and late development. This was a cross functional initiative involving science, informatics and statistical programming department. Obtaining agreements on requirements was indeed challenging. The author had the role as the business lead of the statistical programming team.

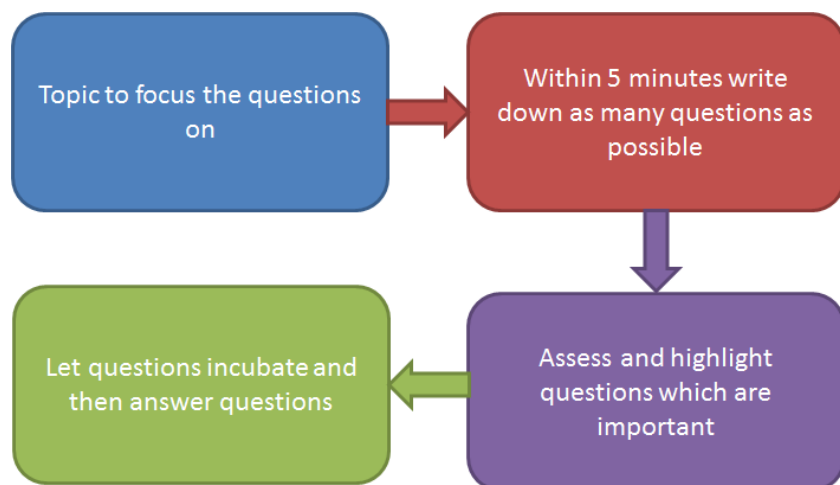
QUESTION STORMING IN A TEACUP

The author's initial experience on PKS generated many questions within a short period of time. Questions ranged from technical ones such as; what is the programming process of creating PK datasets, how does the PKS server connect to our programming environment to issues such as; who are our stakeholders, what is our vision and what are our deliverables. At this point a technique called question storming was employed to provide an order to the large number of questions generated.

The method of question storming³ is straightforward and is very similar to brainstorming (summarised in figure 1).

1. The objective is to generate as many questions as possible in a set time limit, recommended to be short (5 minutes).
2. Spend some time formulating the topic, for the author it was around PKS.
3. Write down as many questions as possible relating to the topic within 5 minutes. For example what is PKS, what is my role, who are my stakeholders, what are the deliverables, what is the vision, who is my team, do I need additional resources, etc.
4. At the end of 5 minutes assess the questions and highlight the ones which are important and prioritise them. So how to prioritise? You cannot know the answers to all questions, so make use of the technical experts in the team and focus on the leadership questions such as "what is the vision?".
5. Do not answer the questions straightaway, leave the questions alone for a period of time between 1 and 3 days. This will allow you to self-reflect while the questions incubate, it also avoids you stepping in and answering the questions straight away.
6. Once the incubation period is over, start answering the questions you have highlighted, also think about the resources you will need to answer some of the questions.

Figure 1 – Question Storming



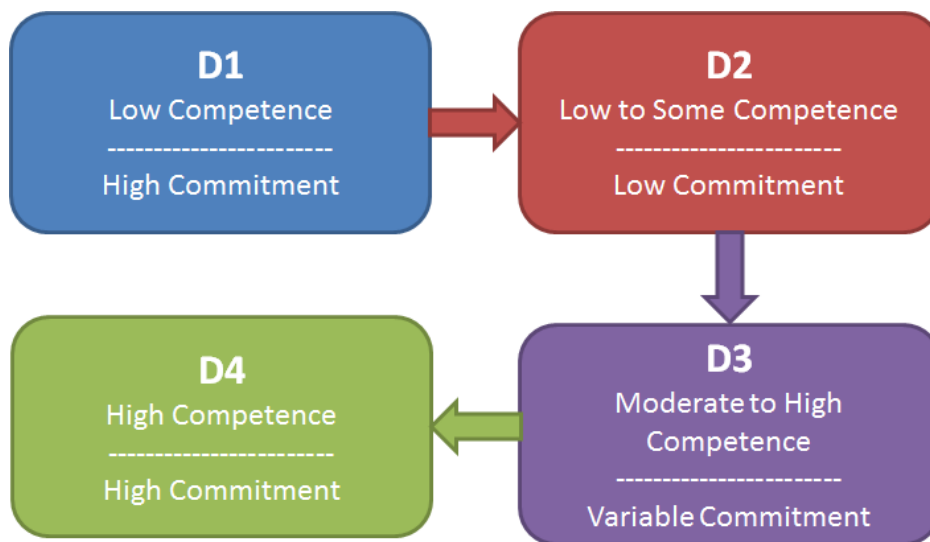
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In this type of situation when the leader is not the SME this is a great way to create a framework to onboard to an area which you are not familiar with. This period can feel like a “storm in a teacup”, but this process can help to bring you to a position of control of the situation.

SITUATIONAL LEADERSHIP DEVELOPMENT

When the author took on a new leadership challenge on PKS, a number of stages were experienced. The initial period started with “wow I am very excited and raring to go” to “how do I do this?”. These stages are well described by the 4 different development stages of situational leadership⁴ (refer to figure 2)

Figure 2 – Development stages in situational leadership



The development areas focus on two factors, competence and commitment. These two factors change as the leader takes on a new challenge to completion. Competence is “the ability to do something well” and requires a combination of knowledge and skills. Commitment is “a willingness to give your time and energy to something that you believe in, or a promise or firm decision to do something.” and is a combination of motivation and confidence.

For example, the initial thoughts when leading the PKS initiative were “Wow, this is an amazing opportunity and I cannot wait to start”. At this point:

- Commitment is high as the newly appointed leader is very excited by this new opportunity
- Competence is low as the leader is not a SME.
- This stage is represented by D1.
- Feelings associated are hopeful, eager, inexperience and optimistic.

After some time, the experience gained in PKS and understood the technical challenges as well as exploring concerns around individuals not being motivated and engaged with the overall team. The initial perception changed to “Well I started to understand the challenges in the team and to deliver has just become a lot harder!”. Sometimes these problems can be described as wicked problems. A wicked problem is when a topic is so big that the solution seems impossible to comprehend and at this point:

- Commitment is low as the realization of the task sets in.
- Competence is between low to moderate, as you now have more information compared to before.
- This stage is represented by D2.
- Feelings associated are overwhelmed, frustrated, discouraged and moments of competence.

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Moving past the previous stage is difficult and requires a lot of willpower and encouragement. It is important to note here that you must have the adequate resources which can help you move to the next stage. Resources can include your line manager, sponsor of the initiative, mentor, partner, etc. From the PKS experience the author would recommend someone who you trust and can provide constructive feedback.

Once D2 has been past, the new leader is no longer new and the expectations of the company increases. In the PKS example the author experienced a certain “ok, I am here now I have fully onboarded, I know my team and my stakeholders. The time for onboarding is over, I now need to deliver, but I feel very cautious about this.” During this new development stage, the leader can become disillusioned, maybe doubt one self and question whether they can perform the task under little or no supervision. At this point:

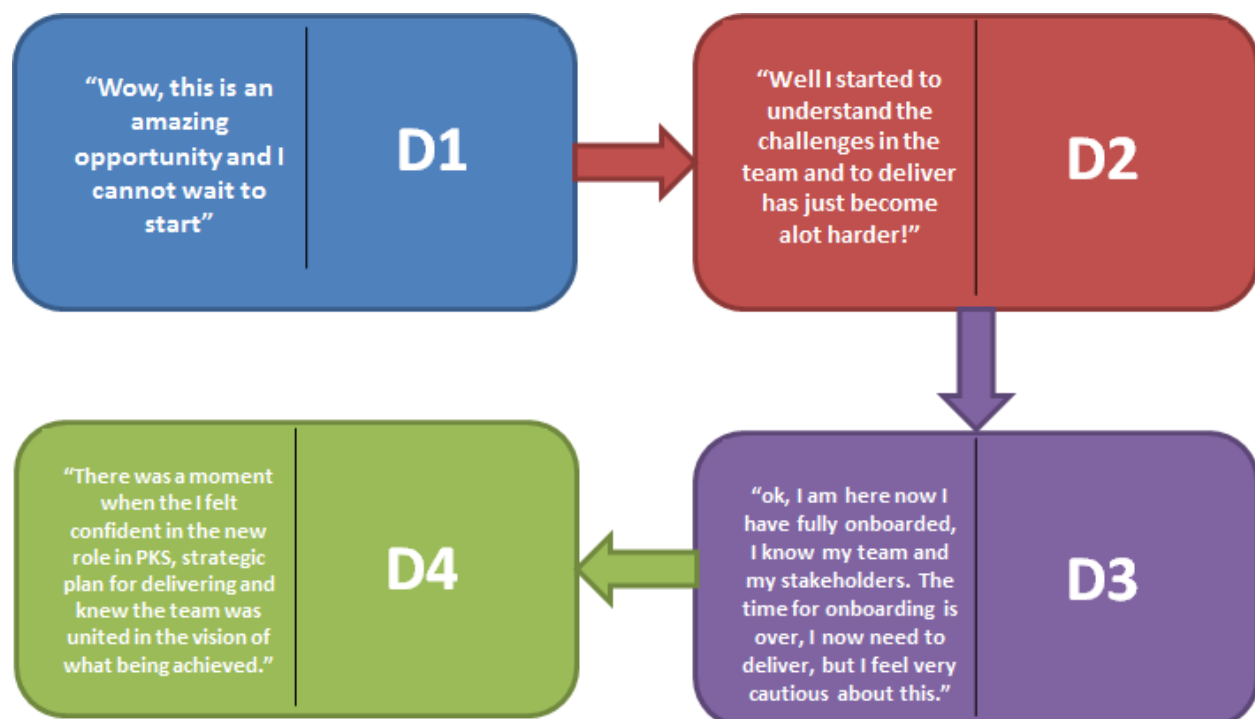
- Commitment is variable
- Competence is between moderate to high
- This stage is represented by D3.
- Feelings associated are self-critical, cautious, capable and apathetic.

Reaching the final stage requires a good framework and a solid development plan, which is the self-reliant achiever. “There was a moment when the I felt confident in the new role in PKS, strategic plan for delivering and knew the team was united in the vision of what being achieved. It was at this moment when the final development stage was reached”. At this point:

- Commitment is high
- Competence is high
- This stage is represented by D4
- Feelings associated are confident, self-assured and expert!

It is interesting to note, towards the end of the PKS project the author did not feel to be a subject matter expert in the PKS technical processes and tools because it did not matter; as the team was full of experts who knew the technical side and just required leadership. Figure 3 represents the development stages with the PKS lead thoughts at each of those stages.

Figure 3 – Development stages with thoughts at those stages



LISTEN, REFLECT, LEARN AND THEN ... LEAD

During the process, one of the first task that the author did in PKS was to listen, learn and then lead⁵ (refer to figure 4) Let's explore each part in more detail.

The initial challenge was to hit the ground running as the initiative had been running for a while. One course of action for the incoming leader was to continue with what the previous leader had planned, but to also bring new thoughts/ideas to the table i.e. with change comes opportunity. The opportunity here was to spend time with the team and stakeholders and to listen to their concerns and ideas moving forward. There was lots of time spent listening to individuals, not asking questions but just listened. There are different types of listening, one can listen but can feel disconnected and have not learnt anything. The author's understanding of listening is showing empathy, absorbing every word, giving it the time that it needs. One to one's are a great opportunity to listen and allows the focus to be on the individual rather than on the team. The author did this with individuals who were in the team and individuals key stakeholders. This required time but was key to the success of the team.

You may have listened to lots of people and maybe overwhelmed with information. This is the perfect time to reflect, absorb and disseminate this information. Try to do this in a place you feel comfortable, most likely away from your desk, maybe in a coffee shop, a quiet room or even go for a walk. The external environment has an impact on your thinking process and how your brain functions. The brain can only process so much information at any one time, so if you are sitting in front of your computer, with the iphone on and engaging in a teleconference, it is very likely you will not have any bandwidth to reflect on what you have heard from your one to one.

Once you are in the right environment the reflection can begin which will allow you to think critically. Certain trends will be formed as well as individual concerns or ideas which will need to be addressed. This is the learning phase and the question to be asked here "What can you learn?". Remember the context here, you have just started as leader of a team but is not a SME. What are the learning's can make you successful in this role? One example, after a number of one to one's, and the question which kept coming back was "Why are we including all types of data models?". The background to this question is when designing the new PKS tools and process, three main types of data models were included as inputs, and different individuals were focusing on one particular type of data model. The programmers involved designing the new tools had a very difficult job trying to incorporate all three data models. After a period of reflection the question was asked to all "Why are we including all types of data models?", the answer was consistent "We need to look perform PK analysis on new studies, but the older/legacy studies should also be considered.", ok the natural follow up "let's not focus on legacy standard but on new standard only. As the legacy format will naturally end and new studies will follow the new standard". The programmers were happy with that but the other stakeholders need a lot more convincing. This is the part where leadership comes into this.

When approaching such situation for a new leader, the listen, reflect, learn and then lead steps can really help focus on what is important. Listening to your team will generate solutions which may seem novel but with hindsight can be seen as the obvious. For example, the solution in the example above was to design PKS tools to work for new data models only, which no one had thought of until the question was asked "Why are we including all types of data models?" This question was only asked because the leader listened and then reflected.

Figure 4 – Listen, reflect, learn and lead steps



ADAPTATION

Moving to a position of leadership when you are not the SME requires on you being adaptable. In this context, being adaptable is the ability of using your transferable skills, keeping an open mind, being receptive, improvising and changing your behaviour. There many types of personality questionnaires which can give you some insight into your current behaviours (e.g. Myers Briggs Type Indicator⁶) and this can be useful to know when you are moving to a new challenge.

Sometimes it can be difficult to identify transferable skills. When this happens it helps to focus on a particular skill and think about when in the past you have had an experience of demonstrating that skill. For example it could be that you have to motivate your new team but not sure how to do that. Thinking back to a previous experience when you had successful motivated a team or an individual, how did you do it, how did the team respond, how did you come across? This will provide a sense of realisation that you were successful in displaying this skill and this experience can be transferred to your new situation.

This mindset change can help you when taking on a new leadership role by making you adaptable to new situations. Often there is a plan for the new role but no transition plan from old to the new role. A transition plan can help an individual identify these transferable skills.

DO NOT FORGOT TO LEAD!

It is absolutely vital that the leader does not forget to lead. In this type of situation when the leader is not the SME, it can be an easy trap to fall into, i.e. spend alot of time just learning the new areas and wanting to be an expert. However the organisation has placed you as the leader and expects primarily to make key decisions, and your team will expect the same. If the team has the right mix of skills and if motivated correctly, they will be willing to provide their technical input and this is where the leader should contribute.

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Be an open book not a closed one. Successful leaders today are the ones who are open and trustworthy rather than closed. This is vital when gaining trust from the team and stakeholders. The team needs believe in the vision, and the vision is where the team wants to be in the future, a bold step is required. The leader is accountable for making the vision come alive and to present a strategic plan of how this can be achieved. It is the strategy that the team needs to believe which will give them the confidence to perform their job.

There are differences between a manager's role and a leadership role. Look beyond the job title and assess the reality of the role. Some of the areas touched upon in this paper can be considered to be a managerial role. In practice, a leader requires management skills and a manager requires leadership skills. The important factor here is to assess the role, determine what is required and do it. There are plenty of papers and books on the topic, there is one called leader vs manager and is an interesting read⁷.

SELF REFLECTION ON THE CASE STUDY

The paper started with the introduction of the PKS case study with the complexities and challenges that came with it. At the time of joining the team there were a number of delays due to the complexity of tools. The rate of progression of tools between informatics and programming teams were different and this impacted the overall deliverables as both dependent on each other.

These types of complexities, delays and scope of work impacted on morale, motivation and engagement of team members. This is when the leader role is important to ensure that these problems can be overcome whilst driving the team forward.

The end result is that the deliverables were met eight months later. The key was the team, it was the individuals who met the challenges and produced solutions which allowed the initiative to be successful. The lead facilitated this by encouraging the right behaviours within the team such as speaking up and challenge.

Some lessons learnt included communication between the team and the end users of the tools. It is easy to become wrapped up in developing new tools, but one must not forget about the end users. Regular communication is needed to inform these users on what has been achieved and what are the next steps. Another lesson learnt included having the right support for the team, which included additional technical specialists which can complement the current expertise of the team.

The team did so well, in not only delivering but in how it delivered that it won an internal company award. This award recognized the contributions made to the organisation and to celebrate the behaviours displayed by the team.

CONCLUSION

In this paper the author describes leadership skills for a particular situation, which is when the leader is not the SME. This presents various challenges such as lack of technical knowledge and not always having the time to absorb the finer details of the topics. It can be helpful to know which development stage you are in for a particular task, as this can help identify how to proceed to a stage where competence and confidence is high as described in the situational leadership section. The onboarding stage can generate lots of questions and cause more confusion, however using the question storming technique can allow logical process to be applied when it seems to be chaotic. Leadership is not done in isolation, there is a team to lead and communication is key to having a strong team who is engaged and can deliver. Listening, reflecting, learning and then leading are good steps to take to achieve this outcome. Taking on such a role requires the individual to be adaptable, look towards previous experiences and to ascertain your transferable skills. Doing this will immediately give you extra resources at your disposal to tackle the new leadership challenge. There can be a danger of spending too much time collecting information to try to understand the wider picture, the time spent here means that there is less time leading. Use your intuition i.e. "gut feeling" based on your experience and feel for the situation balanced with the information available and do not forget to lead. Quoting Ken Kesey, show your team you will always lead by example.

"You don't lead by pointing and telling people some place to go. You lead by going to that place and making a case." —Ken Kesey

REFERENCES & RECOMMENDED READING

- 1: <http://www.phusewiki.org/docs/2012/PAPERS/IS/IS05.pdf>
- 2: Pharsight: A Certara Company
- 3: G. Lynne Snead and Joyce Wycoff "To Do Doing Done: A Creative Approach to Managing Projects & Effectively Finishing What Matters Most" 1997
- 4: Ken Blanchard, Patricia Zigarmi, Drea Zigarmi "Leadership and the One Minute Manager: Increasing Effectiveness Through Situational Leadership" 1985
- 5: Emily Kittle Morrison "Leadership Skills" (3rd Edition) 1994
- 6: MBTI: Isabel Briggs Myers, Mary H. McCaulley, Naomi L. Quenk, Allen L. Hammer "MBTI Manual" (3rd Edition) 1998
- 7: Elena D. Calin ""Leader versus Manager" 2012

ACKNOWLEDGMENTS

The views expressed in this paper are those of the authors and do not necessarily reflect those of Roche or any other organisation that may be cited for reference in this paper.

The authors would like to thank Karen Rowe, Hiren Naygandhi and Waseem Jugon for review, feedback and support in writing this paper.

CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the author at:

Vijay Reddi
Roche Products Ltd.
Shire Park, Falcon Way
Welwyn Garden City AL7 1TW
Work Phone: 01707 3665674
Email: vijay.reddi@roche.com

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