



Final Placement Report- 3G UMTS Product Management, Motorola

By Kai Jiao

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I have spent my placement year working for Motorola at their Swindon site. I worked as a Business Analyst in the 3G product management team. This is my final placement report, in this report, I would like to share my experience from there with my fellow students and hopefully they can learn something out of it. I shall start this by telling you a little bit about Motorola, then move on to talk about how I started my placement there, what my job at Motorola was really about, what I have learnt out of this placement and my report shall ended in telling you what problems I had encountered there and how I overcame them.

Background

Motorola is one of the biggest global telecommunication companies with 69,000 employees 320 corporate facilities based in 73 countries around the world. The company started as Galvin Manufacturing Corporation in 1928 in Chicago U.S. It begun with manufacturing car radios, and adopted the name of Motorola in 1947.

Today, Motorola as a Fortune 100 company with sales of over \$30 billion a year has mainly focus its products on four main areas:

- Connected Home Solution, an area where to provide a scalable, integrated end-to-end system for the delivery of broadband services that keeps consumers informed, entertained and connected (typical products are network broadband modern and cordless telephones)
- Government and Enterprise Mobility Solutions, to provide an integrated radio communications and information solutions, to meet the mission-critical requirements of public safety, government and enterprise customers worldwide.
- Mobile Devices (handsets)
- Mobile Network

During my placement, I was in the 3G (third generation of mobile technology) product management team, which was part of the Motorola's GSD. We are responsible for all Motorola's UMTS 3G network products, which include base stations, RNCs (radio network controllers) and its associate software.

Our primary responsibilities were

- Define product strategy
- Prioritize customer/ market requirements



- Conduct business case analysis of all product portfolio
- Work with regional marketing team to prioritize the level of investment in the 3G portfolio

Introduction and Initial Training

As I started my placement quite late (it was on the last day of August), the student worked there before me had already left. So I didn't really have a student to do the handover with, but it didn't really make my life harder, thanks to the support I received from my managers.

I spent my first few weeks mainly meeting people that I would work with later. Also doing the online trainings and learning about Motorola as whole, its products (specifically on the products that my team is dealing with), my department and my team.

It was a big learning curve for me at the beginning. There were so many important things that I had to learn. But fortunately, my manager Richard Blyth helped me a lot. From helping me to sort out all the IT issues (user name, passwords, pointed at me all the useful websites for work etc) to gave me informal trainings and to dealt with all my problems.

So by the time (fourth week) I received my brand new laptop computer with all other IT equipments, I was ready to go (I have been provided a very old laptop from the day one, but it kept causing me problems so I had to tell my managers about this and they have decided to purchase me a new one).

Below are the official trainings I have done in my first few weeks. To give you a brief idea:

- a) Record Management Program and Procedures;
- b) Six Sigma;
- c) Market requirement training courses
- d) Some U.K law awareness courses

The most useful training course I have done was Six Sigma. Six Sigma is a methodology developed by Motorola since 1986 to manage process variations that cause defects, defined as unacceptable deviation from the mean or target; and to systematically work towards managing variation to eliminate those defects. The theory I have learnt from this training course was extremely helpful for the later work I have done and I believe it will help me to do the University work as well when I start my final year in Bath.

The Job



My job title was 3G Business Analyst, so my job was to work closely with 3G product managers to produce business reports, build and model different business scenarios, maintain the team database and organize and chair the team meetings.

After having the initial training, I started by doing some simple work like collecting information from our competitors on the similar products, then compare and analyze it to report to my managers. Follow by creating feature slides for the customer facing presentations.

Later on I was given my own project to complete under the supervision of Rorie O'Neil, which was to build a business model to show HSDPA's margin in six different scenarios. This was a particularly interesting project and I have learnt a lot from building this model. So I would like to give a bit more detail about it.

HSDPA (High Speed Downlink Packet Access) can be simply referred as a new generation of mobile broadband software, although it has not been commercially deployed throughout the world yet. But because it provides such high speed data rate transmission (up to 14.4Mbps peak data rate), therefore it enables mobile operators to create more advanced mobile broadband services such as mobile internet combined with unprecedented data rate where audio, video and large files or attachments (like photos) can be downloaded significantly faster than the tradition WCDMA at lower cost. Thus Motorola believes that this is going to be the next driving force of mobile technology.

Because this software is going to be attached to its hardware (base stations), and the number of hardware that our customers are going to purchase is depending on the number of mobile phone subscribers they have got. Therefore, in this project, I had to create six different scenarios with different number of mobile phone subscribers to test the number of base stations that mobile operators would require, and then based on the number of base stations that they require, I could calculate how much profits that Motorola can make out of this software from the minimum amount to the maximum amount.

In order to do this project, first I had to have a basic understanding of the products itself. So I read through all the product description books for RNCs and base stations, which was in total at around 200 pages. Then I had to use my initiative to get the latest cost and price information from different product managers (they are based in all around the world). After I have done those preparations, I started to build up this business model, completed it and my model has been used by my team during their talks with the marketing team and regional office as a good reference.

Similarly, for the task of creating feature slides, first I also had to learn about the product itself, have a good understanding of it, and then I had to come up with my own ideas on the layout and the content of the slides in the professional way. Thanks to the supervision I received in this task from Paul Johnson and Darrell Davies, the slides I created have been used during the Motorola's internal and external meetings.



Another big part of my work throughout my placement was to maintain the team database. When I first started my placement, my team's database was really unorganized, there were a lot of outdated files and documents and was everywhere. So I had to update all the documents and re-organize all the files by myself in collaborating with each document owner to get the latest version. That's really improved my inter-personal skills and communication skills.

I have also done some other interesting tasks, but due to the word limits, I cannot mention them all. Here I list all the tasks I have done throughout my placement to give you a brief idea:

- Build and Model different business models
- Create slides for the customer facing presentations
- Use my language skills (as my mother language is the Chinese Mandarin) to translate documents
- Update the customer ordering manuals for our products & staff monthly budget sheet
- Maintain the team database
- Organize and chair in the team meetings

Personal Gains from the Placement

1. Academic

Academically, directly speaking, my placement does not direct link to my degree at all as my degree major is in political science, and the job I did was more business related.

But indirect speaking, this placement does relate to my degree in terms of developing an enquiring and critical mind, the ability to find and identify, assimilate and evaluate new information, and to engage in problem solving, thereby demonstrating a capacity to think clearly and logically. And I believe it will definitely help me a lot in my final year in Bath.

2. Practical

Practically, I benefited from the constant use of Microsoft Office Package, especially Excel alone with intermittent use of other programs such as Powerpoint. Excel and Powerpoint are so useful and important tools, which I believe that most business related jobs, are using them on the daily basis. I have also improved my analysis skills and report writings, which I always used at the university in my essay writings.

3. Personal

At a personal level, I think that the skills I acquired are common to most placements, yet at the same time, it dependent on the style of the management which you are subjected to and people around you. But generally speaking, I have learnt a lot of things in terms of



the telecommunication business as well as improving and developing my communication skills, interpersonal skills, project management skills etc.

Responsibility & Opportunities to Show Initiative

Due to the nature of the work that my team is doing, my managers are constantly busy on the conference calls, attending different meetings internally and externally. So I spent a lot of time working on my own. That left entirely up to me to organize my time and get the things done, and provided me a good opportunity to demonstrate my initiative.

For example, one of my responsibilities was to maintain the team's database, which contains hundreds of documents with different owners not only in the UK but around the world (my team members are based in the UK, US, Ireland, China and India five different countries and three different continents). I had to decide when and how to update those documents absolutely myself with no pressure from my managers at all. I think I did it quite well.

Problems

Throughout my placement, I was lucky enough that I don't really have any major issues to report.

However, the only problem I had to deal with was workload.

Due to the nature of the job, the workload was not constant. At one minute you can be so busy and another minute, you probably left nothing to do. So when you were busy, the key was to prioritize what the most urgent things were, and work on them. When you were not busy, you had to take the initiative to ask things that you can do. But I suppose this is the most common problem faced by most of the placement students.

In terms of the working environment and how I was treated as a placement student.

I have to say that the Swindon site of Motorola is a great place to work, especially the people I worked with, which were very nice, friendly and always willing to help. My manager was incredibly supportive, patient and encourages me to ask questions and to demand explanations, assisted me in my work. I feel that I was accepted by my team from day one and people treated me just like all other employees. I even made friends with some of my colleagues and sometimes we went out to the cinema or went to a restaurant together.

Another thing I have to give a notice is that during my time there, because of 3G business for Motorola wasn't profitable enough. We also suffered the changes within our team where the direction of the group was uncertain for a period of time. This was a difficult time for the team as a whole. However, I wasn't really affected by that and was always supported by my managers and kept informed about the progress. And this was indeed very nice.



Suggest Ways the Placement Could Have Improved, Would I recommend this Placement?

I shall suggest that university should offer more help to placement students in finding their accommodation in the cities where they are working. Every year, there is hundreds University of Bath students go on placements, the first problem that everyone has to face is that find a place to live. But surprisingly, I found out that university does not offer any help at all, especially when the University has got a campus in Swindon itself. There are many companies in Swindon, and I believe there are many students from the University of Bath are doing their placements in Swindon too. Therefore, the University should set up a database providing the accommodation information for the students as well as the landlords, just like the accommodation database that university running in Bath. That will make students life a lot easier.

Overall, I would recommend this work placement to all students. It would increase your professional knowledge and skills and broaden your horizons. It is definitely worth it.