SEG3902

CO-OP WORK-TERM REPORT (Winter 2014)

**AGILE SOFTWARE DEVELOPMENT**

MediaVantage

By

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## Abstract

This report will include details about the Agile Software Development process that MediaVantage adopted as their main development process, its advantages and its challenges. I will also discuss the general benefits of the agile process, and why it is considered one of the most efficient and most popular current development processes.

Engineers in the software field do not often consider Product Verification when first thinking of an area of work. Although all software engineers understand the Product Verification Process in software development, younger software engineers might not fully understand its importance. The main purpose of product verification is to ensure that a product meets customer requirements and specifications and that it performs as expected. My main duties throughout my work term as a Product Verification Student at Nakina Systems were focused on the Product Verification Process of one of the company's products, NI-Director. I was responsible for testing this product by writing test cases, executing test steps and reporting issues in the appropriate manner. Moreover, I performed some other tasks such as regularly upgrading the testing system and testing adapters. I had the privilege to experience employment with Nakina Systems, and I was fortunate enough to see for myself the importance of product verification in the industry, all while learning how to write proper test cases and the testing process.

My engineering background has been highly beneficial to me while acquiring new technical knowledge. Moreover, I gained interpersonal and team skills by working with influential individuals who allowed me to learn from their expertise, as well as I expanded my network to include experienced professionals. This work term was highly critical to my development as an engineer and a growing member of the high-tech community.

# I Introduction

MediaVantage was designed and developed by dna13, a software company based in Ottawa, Canada. CNW Group, a Canadian company that had already been reselling their software solution since 2005, acquired dna13 in April of 2010. The dna13 solution was renamed MediaVantage in September of 2010. A trademark of CNW Group, which is owned in part by US-based PR Newswire, MediaVantage

# II MediaVantage

## Public Relations

## What is MediaVantage?

MediaVantage is a web-based application that monitors media mentions and online conversations, aligns corporate teams and measures communications success. Public relations, investor relations and marketing communication professionals around the world rely on MediaVantage to help manage their brands and protect their corporate reputation. Sharing the name of the company, the MediaVantage software solution provides real-time access to TV, radio, print, Internet and social media content. It gives communicators the tools they need to both plan and fine-tune communications strategies, synchronize corporate messages and engage with key stakeholders.

# Agile Software Development

# Other Projects

## Investigation

## Quality Assurance

# Recommendations

## MediaVantage

I sincerely believe that MediaVantage was a great place for a CO-OP placement. Everyone that I have met or have worked with at this placement was extremely welcoming, encouraging and ready to help and mentor me with anything I needed throughout the term.

In terms of support, I owe a lot of thanks to mainly the senior developers of the team. During the first couple of weeks, and throughout the entire term, they many hours teaching me everything I needed to know, from how the testing procedure works to writing weekly status updates to reporting product bugs on my own. It was a great environment to learn important skills such as how to work in teams on one project as well as more technical skills such as upgrading systems using Unix commands, writing test cases and running them efficiently.

I believe that this was a critical position for me to have as a CO-OP student, as it is very much related to my program and it exposed me to so much of the real word of a professional in the field. I was constantly challenged with new tasks that would push the limits of my skills, and I found that my knowledge of good software development was always constantly increasing as my experience with the company grew. This having been my first development job, I was able to look at software at a completely different angle than I had at my other terms, and really focus a few of the functionalities of the MediaVantage product. For that reason, I would recommend this placement to other junior software engineering students.

## CO-OP Program

For my third work term, I was able to use the resources of the CO-OP office to secure my placement. The CO-OP office made the process of finding exactly the job that I was looking for with MediaVantage very simple and they were very encouraging. Previous help with preparing for an interview helped when it came to all of my interviews with the different candidate placements.

I would maybe encourage the CO-OP office to communicate a little more with their students throughout the work term. The advantage to doing so would be that students will keep in mind that CO-OP is a credited program and it would keep them up-to-date with what’s new in CO-OP as well as with upcoming deadlines.

In general, I found the CO-OP office very reliable for students. Every time I had a question, I called in and got an answer immediately. Since my start with the program, I have highly recommended it!

# Conclusion

In conclusion, the agile software development process is clearly one of the most effective processes for developing software when executed efficiently and in an organized manner. After four months of exposure to this process, including a full release cycle, I have come to understand the real importance of proper execution of the agile process and its impact on the software quality and delivery. With the future advancements in new processes and development techniques, it is my opinion that agile will remain a common method with a good chance of minor modifications to the method that would result in even more efficient and effective software development because of its flexibility to requirement modification and its dedication to maintaining a workable status.

Throughout my work term, I was able to relate some concepts and knowledge learned through my classes and personal experience to my daily tasks. Through new challenging projects and assignments, I am able to pick up many new lessons and will incorporate such information into future applications. I had the chance to experience many aspects of software development for one of the company's current major products that not only exercised but also expanded my software engineering skills. I would recommend this position to any other software engineering, computer engineering or computer science student looking for a work term, as it provided an in-depth and hands-on experience with software engineering as a developer.

I would like to sincerely thank all employees of MediaVantage for granting me the opportunity to be a part of their group and to learn from their expertise. I gained valuable hands-on experience with the development of the CloudCity release of MediaVantage as well as I greatly expanded my knowledge about good general software development practices. Most importantly, I gained interpersonal and team skills by working with a brilliant and collaborative team who took the time to train my CO-OP and me peers. I valued my time at MediaVantage and hope to be able to carry on all that I have learned into my future projects.

Since all software developers at MediaVantage work in Linux, I had to learn how to install, use and maintain a version of the Linux operating system on my desktop computer. This being my first challenge on the job, I was able to learn how to use it quickly enough and over the term, I adapted to new shortcuts and operations that I discovered along the way.

Another major lesson that I’ve learned from this work term is how to work on large projects in a large team. This was my first time working in an agile process,

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# Appendices

# Supervisor’s Approval

As supervisor of CO-OP student **Samira El-Rayyes**, I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, certify that, to the best of my knowledge, this report is entirely the student’s work and is free of confidential information to the extent that it can be read by university faculty members.

Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_