1. This project was ran by ARC @ UNSW, which is a not-for-profit student organisation based at the University of New South Wales, and was funded by the UNSW Student services and Amenities Fee. It took place from 2014 to mid 2017. The goal of this project was to find a model to make technology sustainable, as right now the number of computers getting replaced is growing by the day as technology becomes more and more integral to our lives as academics, and our current methods of recycling are just not good enough. To analyze their data from interviews of people related to “The Scheme”, the researchers used a qualitative analysis method called Interpretive Phenomenological Analysis (IPA), which is a method of analysing and designing the collection of qualitative data, with the ideal data being semi-structured interviews within a phenomenological and idiographic theoretical framework. To see their results, an analytical framework of the network underpinning the Scheme was developed to support the analysis. They found that the demonstration of passion and commitment to various sustainability outcomes as defined by the individual, was linked to attracting, retaining, and engaging participants to the Scheme.
2. At McMaster University in Hamilton Ontario, they have a program very similar to The Scheme. They call it the “Trash to Treasure” program. It differs slightly from The Scheme in a few ways. The first major way is who it is being run by. Rather than being a student initiative with administration support, it is simply entirely run by Facility Services and University Technology Services at McMaster, which has very little student involvement. The next major difference between these two programs, is while they both attempt to reuse and donate any computer they can, if the computer in question is not up to technology standards (their standard is anything newer then 2014), they will simply safely recycle the technology. The final difference that I could find, was that this program is mainly geared towards donating computers to children, rather than anybody who needs one.
3. If I were to set up a Queen’s version of the Scheme, I would have retained many features of the original model. The main one, would be having students play a large role in the initiative, as this seemed to be one of the main reasons the Scheme succeeded, while other versions failed. I would differ from the Scheme by attempting to implement a method to extend the usability of older computers beyond their normal lifespan. The way I would go about this, would be to use some of the University’s pre-existing resources to provide offboard over-the-air processing. Examples of this already exist, such as Amazon Web Services “Workspaces”, or Microsoft Azure’s “Visual Desktop Infrastructure”. This would allow someone to access resources of a significantly more powerful computer then their own, all from any device with an internet connection. Something else I would do, is actively encourage the use of Solid-State Drives. Currently, the main part of the computer that will fail is the Hard Disk Drive (HDD), which could be mitigated by using more expensive Solid-State Drives (SSD), which have far fewer moving parts and are therefore significantly less prone to failure, and while SSD’s are significantly more expensive then HDD’s, you would need very little storage as everything would be held and processed on the cloud. Another thing I would do, would be host information sessions on how to repair computers by yourself, as significantly more times than not, when a computer breaks, it’s only a single part that is broken rather than the whole computer. These information sessions would talk about how to diagnose what the issue with the computer is, and then all the important ways to figure out how to fix the part you have identified is broken. The important part here is that I wouldn’t be teaching people how to fix each individual part, but how to learn how to fix any part. This would not only improve computer lifespan, but also improve the average technical literacy, and practical research ability in students. Another added benefit of these information sessions is that students would know which parts are more important than others to make sure they are of high quality, which would improve sustainability in their next computer purchase whenever that may be.