**Final Report: TR3202**

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**Company: Waterfall Security Solutions**



**Executive Summary**

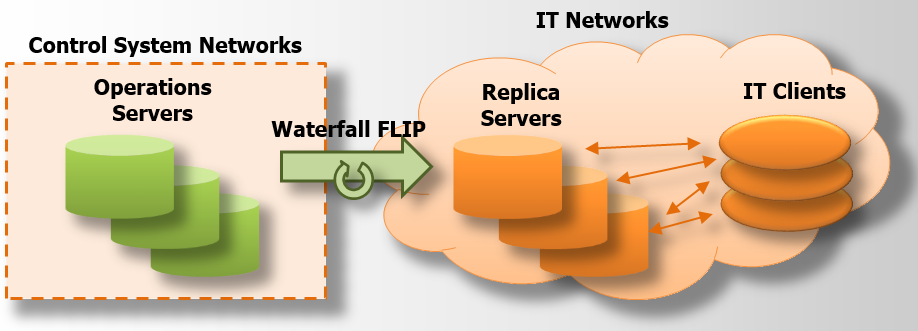
Update on company and internship focus: Since I started, Waterfall Security Solutions has employed more people, and started to expand the team in all departments, from the hardware, to software, to sales and marketing teams. In terms of external developments, we are moving into Indonesia in terms of APAC region. Also, we are adding more and more features into the product which will keep and grow a larger customer base.

Internship Details: My main role being in DevOps, was to support the development teams. To that end, I oversaw two main projects, implementation and maintenance of EasyRedmine, and Gerrit softwares, to be used by the product development team. For these projects, I picked up Linux server administration via virtual machines, networking, bash scripting and python language, setting up proper build/testing and production environments.

Personal Growth: Of course, being in unfamiliar overseas environment has improved a sense of personal responsibility, as well as having to pick up skills such as cooking, learning programming languages in my spare time, always having a sense of curiosity and love of learning, thinking about problems which society faces, and thinking of ways to solve it. These skills and mindsets helped me to adapt to and thrive in these past brief, but fast paced months, and which I never would have cultivated if it were not for this opportunity. Being in the TAU program was a privilege as it gave me lots of exposure, both in theory and practice to how the startup ecosystem is like, from the ideation to the funding to the customer acquisition process. At the same time, being students, we had the chance to interact with the student community, which included other exchange students as well, in both informal and formal settings, and we learnt much about both Israel as a nation, and everyone’s opinions of it.

Entrepreneurship focus and outcomes: One of the most promising ideas we have had is The Magic Cookbook. Simply put, it is a mobile application that accepts ingredients as input, and shows a list of recipes based on it. It was warmly received in the phase of market validation, and we managed to get funding for developing the idea post internship. One way the program can improve is to provide prototyping tools and knowledge to construct mockups, prototypes or even Minimum Viable Products (MVP), so that each team would be able to bring out their ideas in some physical form, as opposed to using slides all the way.

A. Updates on company and internship focus – Have there been any major changes at the company since you started? What about changes in the market or industry that have impacted the company? What are your views on these, whether from the technological perspective, or from the business angle? Alternatively, compare your understanding of the company, its industry or product/s from the time you first started, to how you view them now, as you prepare to complete your attachment. Reflect on the factors that have shaped your perspective.



Our focus is still in Singapore, Korea and Japan, however we are trying to expand into Indonesia. As countries develop, the amount of critical infrastructure that it needs increases, and so the market demand for Waterfall products for cybersecurity increases.

B. Internship details – What were the main projects or functions that occupied your time during this reporting period? Did your role at the company evolve and why? Related to the projects or functions above, please give details about two significant contributions you made during the reporting period and explain why they were important to the company. What new skills or knowledge did you acquire through your involvement in these projects? What challenges did you face, and what would you have changed if you could?

Throughout these past few months, my role has primarily been to support, and improve the product development process of Waterfall, by first, improving the code building and testing environment that

Being in Israel has ‘forced’ me to go out of my comfort zone. One thing I have learnt from the Israelis is always to be direct and upfront, and not to be too concerned about offending others. Being able to speak your mind, and not having to worry about the thoughts and feelings of others is a self-development skill. Also, as foreign students, we need to rely on Israel’s public infrastructure for our daily needs. But services such as transport, health, housing, the execution level of predetermined plans are not what we are used to. Coupled with the fact that many of the signs, guides, and directions are in Hebrew and Arabic, this can create messy situations, or as the Israelis call it ‘balagan’. We were constantly spurred on to develop a mindset of being able to adapt and react quickly to changes in surroundings and situations, and making decisions based on the limited information available to us at that point in time. Having such a mindset helps us in entrepreneurship, especially in starting a business, where market conditions, and company focus changes frequently.

In part because of my work experience, I grew to love learning, as well as perfecting the art of learning, and absorbing new amounts of knowledge all the time. This has led me to go to certain meetups, as well as take up two part time online classes, one on C programming language, another on philosophy. Being able to learn quickly, and to love learning, is a valuable skill for any entrepreneur wishing to startup a business. Although startup founders may have a certain special expertise to contribute, they are not relegated to being one-trick ponies, and having to take on all sorts of roles in the initial stages of a company is one of the factors for success.

The TAU program was really helpful in terms of thinking about how to conceptualize a business model, and how it works together with the targeted market. I really appreciate Professor Noga’s efforts to expose us to the entrepreneurship ecosystem. On top of that, being a well-connected venture capitalist, she has brought in high ranking officials, who are from the public sector, active entrepreneurs, and so on in order to expose us to the different factors that affect the startup scene, thereby broadening our perspectives. Her lectures gave us a bird’s eye view, and pointed us in the right direction when deciding on a good business model. Coupled with another module on market validation, this semester deepened and widened our knowledge on what starts, and grows a business. At the same time, she took the effort to personally do a one-on-one consultation with all the teams for the final presentation in order to straighten out their pitch performances, and give each of us valuable advice if we were to take our ideas and turn them into profitable businesses.

Also, being in TAU, we had the opportunity to go to formal and informal events organized by campus, where we met other exchange students, and other local students. Because Israel, much like Singapore, is a land of immigrants, we managed to learn much about, and appreciate the cultures and backgrounds of everyone. Each individual we met had a unique story to share with us, and I think we took a sense of the world being much bigger than what we originally thought, and with that sense, we walked away being humbled. On top of that, one of the best opportunities we ever had, was to live with a local Israeli student in the rented flat. Staying with him, we got to truly know, and listen to the stories of what the man-in-the-street faces each and every day in Israel. It was a unique experience. As a budding entrepreneur, it taught me that, in order to understand our customer base, we have to use our products as they use it, and understand their rationale, their mindset, and their attitudes.

D. Entrepreneurship focus and outcomes – Having been immersed in a highly creative and entrepreneurial environment for half a year, what innovative products/technologies or business ideas have come to mind? Please share one of these ideas in some detail. How do you intend to pursue or develop it, post-program? In your opinion, what else can be done during the program to facilitate exploration and experimentation in this regard? How should the program’s assessment methodology be improved so as to enable interns to more concretely measure the extent of their learning and transformation?

-focus on other areas, all-roundedness (1 week of another guy’s job)