A2: DevOps White Paper – Research Notes

***Sources:***

**“The Future of DevOps”**

[**https://dzone.com/articles/the-future-of-devops-3**](https://dzone.com/articles/the-future-of-devops-3)

**“The Future of DevOps: Predictions for 2019”**

[**http://www.dbta.com/Editorial/News-Flashes/The-Future-of-DevOps-Predictions-for-2019-127287.aspx**](http://www.dbta.com/Editorial/News-Flashes/The-Future-of-DevOps-Predictions-for-2019-127287.aspx)

**“The future of DevOps is mastery of multi-cloud environments”**

**<https://opensource.com/article/18/1/future-devops>**

**Rough Draft:**

DevOps will be useful in the future as the line continues to blur between the development of apps and software and their maintenance and upgrades to newer features. Traditionally, the development of new software and the maintenance of that software and elimination of bugs as well as adding features have been separated. However, DevOps relies on an integration of the two: “breaking down siloed groups of people and responsibilities, and – in their place – building teams that can multitask on technical issues and goals” (Steinborn).

Software development in the world of apps versus old-style programs require more rapid release of software and adapting the software to newer operating systems. “Concepts and methods like continuous integration and continuous release will be more broadly implemented and automation will play a larger role” (Steinborn). Also, as software is released more rapidly, there will be less time for bug checking and finding gaps in a software’s security, thus requiring security to be added and privacy concerns needing to be addressed in a more rapid manner, eventually needing to be completed alongside development and maintenance of the software (Smith).

Currently, both data collection and product requirements and product testing require a more nimble environment so as not to be left behind in an ever-faster app development process. DevOps will shrink the app life cycles so that “testing and production are integrated, and you see problems before you go live thanks to testing and troubleshooting” (Smith). Also, security issues can be addressed before the product goes live, leading to less vulnerability to hackers and malicious software users (Smith). Development teams can also rely on more automation in the process so that companies and individuals can release software faster than their competitors and at a lower cost. As “more technology professionals become comfortable leveraging containers in production and recognize benefits… such as faster start-up times, better resource utilization, and finer-grained management” (Wells).

DevOps integrates automation, cross-functional work teams, and faster development and more nimble process cycles allow for a much-improved app development process, reducing costs for software and making the industry more responsive to public needs. DevOps will ultimately make software design, development, and maintenance much more seamless in the future and a must-have process for all companies and developers.