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2018-04

Scaled Approach to Open Sourcing Department of the Navy Produced Software

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<http://hdl.handle.net/10945/60512>

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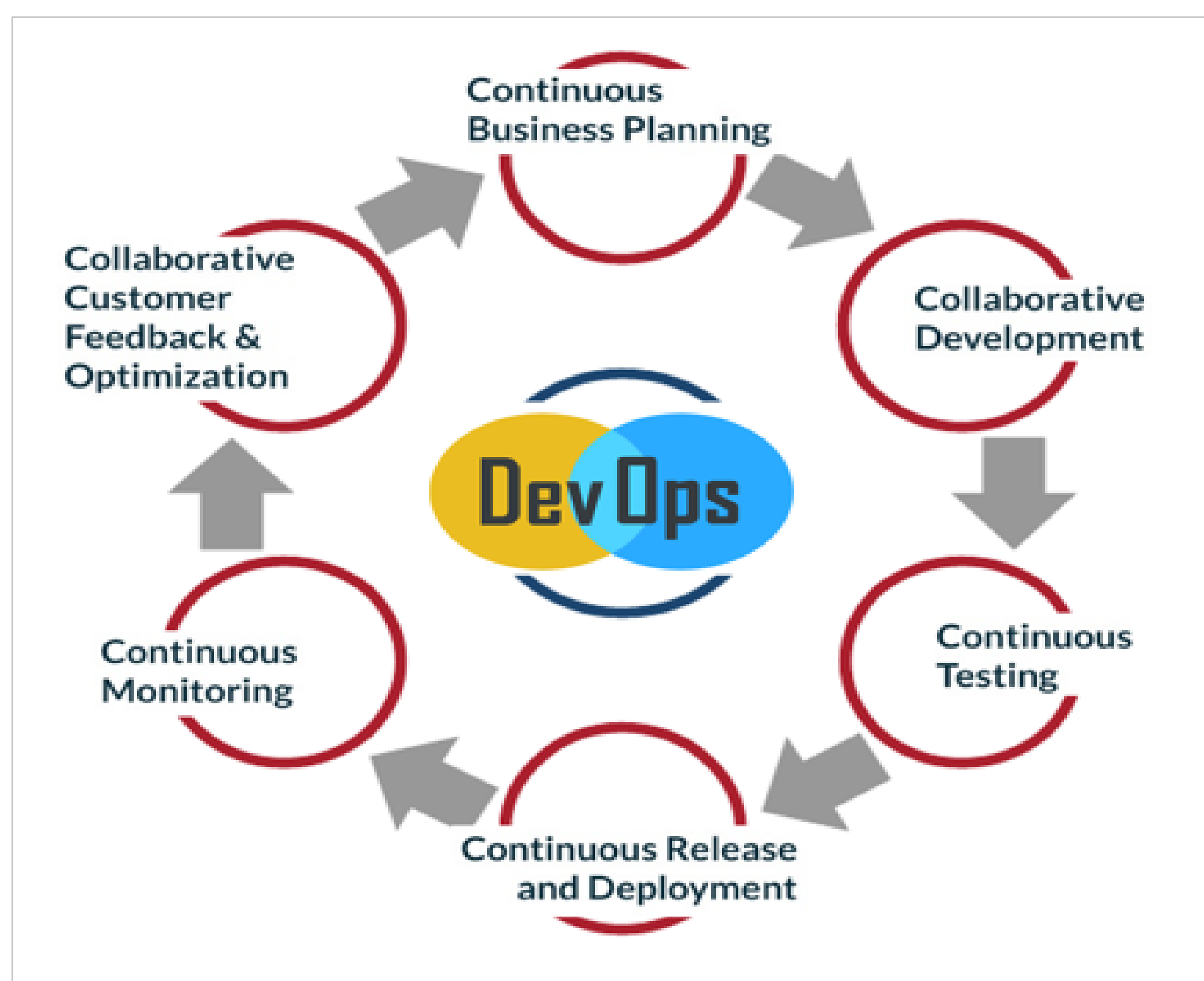
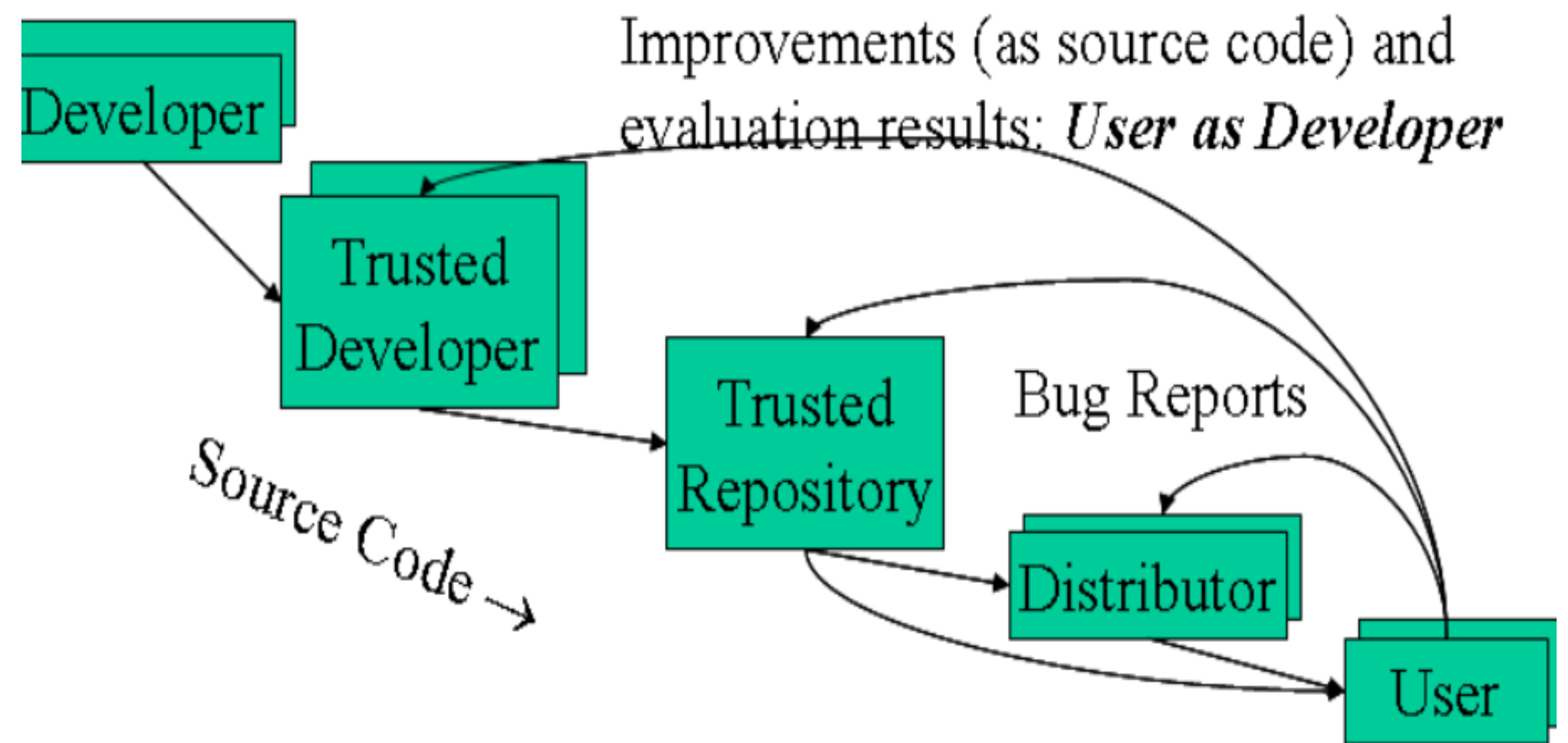
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Objectives

- Determine the feasibility of using open source software for Department of the Navy (DON) Systems from unclassified through classified
- Determine if there is a discernible cost benefit for a program using open sourcing for development and if it affects maintenance costs
- If it is not possible to build an entire program with open source software, is it cost effective to use partial open source software in a scaled approach

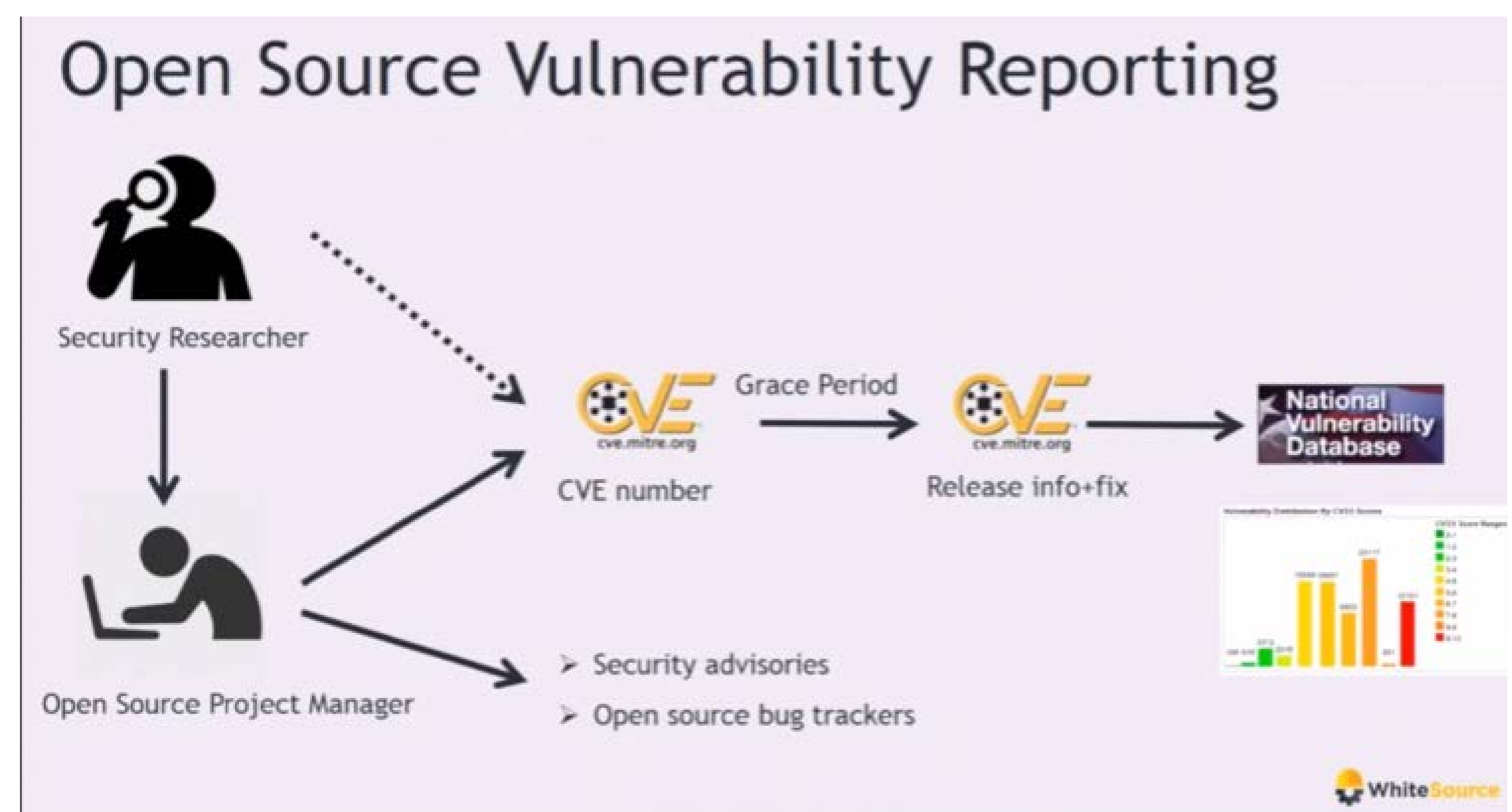


Analysis Methodology

- Literature reviews
- Webinars
- Conference attendance with vendor shows
- Cost benefit analysis of developing total or partial programs using open source software and the cost of maintaining them
- Review of statistics regarding security vulnerabilities in open source software

Findings and Conclusions

- The DON should move forward to maximize use of open source software
- Take advantage of SoftwareForge collaboration tool that DoD has negotiated and established
- Open source software implementation combined with the Development and Operations (DevOps) methodology will enhance and accelerate code development and deployment in the DoN.
- More authors lead to fewer vulnerabilities.



Future Work

- Rewrite a legacy business application to be more user friendly using the DevOps approach of having software developers work with software operations personnel
- Chose the appropriate legacy application to rewrite
- Develop a prioritized list of applications to transition to open source software



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Topic Sponsor: Deputy Under Secretary of the Navy for Management

NRP Project ID:
NPS-17-N088-A