

UNIVERSITY OF MINNESOTA
SENG 5852

Analysis of Continuous Integration, Delivery, & Deployment

RESEARCH PAPER OUTLINE

LUE XIONG

March 19, 2019

Contents

1	Abstract	2
2	Introduction	2
2.1	Thesis Statement	2
2.2	Purpose	2
3	Body	2
3.1	Differences of Interpretation & Implementation	2
3.2	What is Continuous Integration, Delivery, & Deployment . .	2
3.2.1	Inherently Agile	2
3.2.2	Continuous Integration	2
3.2.3	Continuous Delivery	2
3.2.4	Continuous Deployment	2
3.3	Struggles of Traceability	2
3.4	Paradigm Shift in Leadership	2
4	Conclusion	2
5	Bibliography	2

1 Abstract

2 Introduction

2.1 Thesis Statement

2.2 Purpose

3 Body

3.1 Differences of Interpretation & Implementation

3.2 What is Continuous Integration, Delivery, & Deployment

3.2.1 Inherently Agile

3.2.2 Continuous Integration

3.2.3 Continuous Delivery

3.2.4 Continuous Deployment

3.3 Struggles of Traceability

3.4 Paradigm Shift in Leadership

4 Conclusion

5 Bibliography

References

- [1] Atkinson, B., & Edwards, D. (2018). Generic Pipelines Using Docker: The DevOps Guide to Building Reusable, Platform Agnostic CI/CD Frameworks. Berkeley, CA: Apress. doi: <https://doi.org/10.1007/978-1-4842-3655-0>
- [2] Bosch, J. (2014). Continuous Software Engineering. Cham: Springer International Publishing. doi: <https://doi-org.ezp1.lib.umn.edu/10.1007/978-3-319-11283-1>.
- [3] Shahin, M., Babar, M. A., & Zhu, L. (2017). Continuous Integration, Delivery and Deployment: A Systematic Review on Approaches, Tools, Challenges and Practices. IEEE Access, 5, 3909-3943. doi: 10.1109/access.2017.2685629

- [4] Ståhl, D. (2017). Large Scale Continuous Integration and Delivery: Making Great Software Better and Faster. [Groningen]: University of Groningen.
- [5] Ståhl, D., Hallén, K., & Bosch, J. (2016). Achieving traceability in large scale continuous integration and delivery deployment, usage and validation of the eiffel framework. *Empirical Software Engineering*, 22(3), 967-995. doi: 10.1007/s10664-016-9457-1