VISVESVARAYA TECHNOLOGICAL UNIVERSITY
JNANA SANGAMA, BELAGAVI – 590018

A Technical Seminar Report On

"DEVOPS - THE FUTURE OF TECHNOLOGY"

Submitted in partial fulfillment for the award of degree of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

Submitted By

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This is to certify that the Technical Seminar work entitled **"DevOps - The Future of Technology"** is a bonafide work carried out by**, PRAJWAL (4MU16CS088)** at the department of Computer Science and Engineering, Mysuru Royal Institute of Technology, Mandya, in partial fulfilment for the award of BE in Computer Science & Engineering of the Visvesvaraya Technological University, Belagavi during the year 2019-2020. It is certified that all corrections/suggestions indicated during Internal Assessment have been incorporated in the report deposited in the departmental library. The Technical Seminar report has been approved as it satisfies the academic requirements with respect of Technical Seminar work prescribed for the Bachelor of Engineering Degree.

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DECLARATION

I, **PRAJWAL H S (4MU16CS088)** hereby declare that the Technical Seminar report, on **"DevOps - The Future of Technology"** submitted in partial fulfillment of the Vishvesvaraya Technological University for the Award of degree of Bachelor of Engineering in Computer Science and Engineering is a bonafide work carried out by me under the guidance of **USHA K PATIL,** Assistant Professor in CS&E, MRIT, MANDYA.

This report has not been submitted earlier to any other university or institution for the award of any degree/diploma.

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ABSTRACT

DevOps is the portmanteau of development and operations. In recent times, the agile transformation was adopted in IT organizations for continuous integration principles in software development life cycle (SDLC) which has improved the efficiency of development in the project. With time being it has been realized that the optimization does not help in only continuous integration to make the software delivery process efficient. Unless all the modules in software delivery lifecycle are well designed, implemented and optimized. This is the problem with previous technologies and DevOps addresses it. This paper explains the various phases of SDLC, business needs and ways to move from continuous integration to continuous delivery.Development to Operations (DevOps) will have a profound impact on the global IT sector in the near future. Realizing DevOps' full potential, IT vendors have been agile enough in providing new products and services under the label "DevOps inside", at an ever- increasing pace. However, with the growth in product choices, conflicting definitions and competing services, customers often encounter confusion, while making complex purchase decisions. They often seem to be unsure about how to deploy DevOps and get the most out of the solution.

Many organizations which develop and use Information Systems make a structural division of their software departments. One pattern which is often repeated is the separation between software development and system operations. Lately, there has been discussion about whether this division is warranted. This discussion centers around a concept called DevOps, which has thus far not been frequently discussed in academic literature. We hope to increase understanding of DevOps by reviewing the literature regarding the concept and some closely related concepts. DevOps is the new development that addresses such inefficiencies. It connects development, quality assurance, and technical operations personnel in a way that the entire 'build-release-run-repeat' process operates as a factory, having clear roles and responsibilities and well-defined inputs and outputs.

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