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## Module 8.2 Assignment: The Dangers of Change Approval Processes

Website changes, patches, and updates don’t occur simply because a developer decides to modify something. Managing changes has become too important and needs to be approached with care. Over the years, businesses have witnessed the consequences of deployment failures and the significant impact they can have. In the book *The DevOps Handbook: How to Create World-Class Agility, Reliability, and Security in Technology Organizations*, the authors highlight one of the most prominent software deployment failures in recent history, where a fifteen-minute error resulted in a $440 million trading loss (Kim et al., 2016).

The approval process in change management is designed to maintain stability by following a structured sequence. The workflow moves through individuals or groups, known as approvers, who have the authority to review and accept requests or ideas. This process promotes a transparent decision-making system, ensuring that the appropriate stakeholders quickly evaluate each request. However, it has its own challenges. An approval chain can lead to problems such as reduced innovation, increased costs, bottlenecks, human error, and the creation of a bureaucratic environment (*What Is Approval Chain | Meaning & Definition*, n.d.).

For instance, lengthy approval times can delay or even prevent the implementation of new features. As Gene Kim and his co-authors emphasize in *The DevOps Handbook*, organizations must prioritize speed and efficiency in their software delivery pipelines to remain competitive (Kim et al., 2016).

Additionally, increased overhead—such as additional paperwork and meetings—can create inefficiencies. These costs can be both direct and indirect, including the time developers and other stakeholders spend waiting for approvals, as well as delays and errors caused by a cumbersome process (*The Guide to Building a Better Approval Process*, 2024).

Another risk of change approval processes is bottlenecks and human error. If only one person or group has the authority to approve changes, the process can become a significant bottleneck. Furthermore, human error—such as overlooking critical details or reaching incorrect conclusions—can hinder even well-designed approval procedures.

Overly complex change approval processes can also foster a bureaucratic environment, where decisions are made slowly and inefficiently. This can result in frustration and demotivation among employees, who may feel hindered by a system that appears to impede progress rather than facilitate it (*What Is Approval Chain | Meaning & Definition*, n.d.).

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