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CSD 380 Secure Software Development

Module 8.2 Assignment: The Dangers of Change Approval Processes

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July 10, 2025

The Dangers of Change Approval Processes

Change approval processes are designed to reduce risk by strictly controlling when and how updates are made to IT systems, software, and infrastructure. While this structured approach offers some benefits, increasing evidence suggests that traditional methods, like the Change Advisory Board (CAB), often create more harm than good. In today's fast-paced environments, these practices can become obstacles instead of safeguards. They might slow down progress, lower team morale, and even jeopardize system stability.

A major concern with traditional approval processes is that they frequently delay development and deployment without effectively reducing risk. The State of DevOps Report, which draws on years of industry data, found no link between external change approvals and lower rates of change failure. In fact, organizations using manual approval methods have experienced longer lead times and fewer deployments, indicating that these controls cause delays without improving reliability. Developers and operations teams often spend time waiting for meetings or approvals that offer little real value, leading to frustration and bottlenecks that hinder overall business progress (DZone, 2023).

These approval systems can also create a false sense of security. Going through a formal process does not guarantee that a change has been thoroughly reviewed or properly evaluated. In many cases, reviewers involved in the approval process may lack the technical expertise to catch potential problems or may approve changes based on habit rather than scrutiny. This can result in rubber-stamping behavior, where changes pass through without proper inspection, leaving systems vulnerable despite appearing compliant (DZone, 2023).

The cultural impact of traditional change approval processes should not be overlooked. Developers who are consistently delayed or second-guessed by outdated processes may feel demoralized or distrusted. A 2018 article by CMW Lab notes that excessive control can alienate teams and reduce engagement, especially when approval boards do not have a clear understanding of the technical work being performed. Over time, this erodes trust between teams and leadership, fosters resentment, and may lead to employee turnover. Excessive bureaucracy can also lead to change fatigue, where team members become overwhelmed by the number of steps involved in making even small updates. This fatigue can lower concentration and raise the risk of mistakes.

Fortunately, many modern organizations are shifting to risk-based or automated models that preserve control without sacrificing speed. These include peer-reviewed pipelines, automated testing, and clear classifications for change types. For instance, standard low-risk changes may be pre-approved, while higher-risk updates undergo more scrutiny. This targeted approach maintains safety while reducing unnecessary delay (ManageEngine, 2024).

In conclusion, while change approval processes are meant to improve safety and control, they often backfire when implemented too rigidly. They can delay progress, frustrate technical staff, and provide only superficial assurance. The key to avoiding these dangers is to adopt flexible, context-aware approval models that align with modern development practices. When organizations focus on automation, team empowerment, and transparency, they can manage risk effectively without sacrificing innovation.

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