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DevOps Mod 8

The Dangers of Change Approval Processes

#### **Introduction**

Change approval processes are essential to ensure that any modifications to systems, processes, or products are thoroughly reviewed and authorized. These processes aim to maintain system stability, compliance, and quality control. However, as businesses increasingly strive for agility and speed in response to market demands, change approval processes can introduce risks that counteract their intended benefits. This paper explores the dangers associated with change approval processes, particularly in modern agile and DevOps environments, where speed, innovation, and collaboration are critical.

1. **Bureaucratic Delays**

One of the most significant risks of change approval processes is the introduction of bureaucratic delays. In traditional change management, approvals often pass through multiple layers of management, with each layer reviewing the proposed changes. While thoroughness is crucial, this can significantly slow down the delivery of changes, leading to project delays.

A study by Forsgren et al. (2018) found that organizations with complex change approval processes tend to release code much slower than their counterparts, which empowers teams to self-manage change approvals. In fast-paced industries, these delays can result in missed opportunities, decreased market competitiveness, and the inability to respond to security vulnerabilities promptly. The longer a change takes to be approved, the longer a business is exposed to risk, especially in industries requiring continuous updates.

1. **Stifling Innovation and Team Autonomy**

Change approval processes can also stifle innovation by creating a culture of fear around making changes. When developers and engineers are subject to rigid approval processes, they may hesitate to propose innovative solutions. The fear of rejection or long wait times may discourage creativity, leading to stagnation in development and technology improvements.

A report by Humble and Farley (2010) on continuous delivery highlights how traditional change approval boards (CABs) often operate risk-averse, focusing on minimizing change rather than promoting innovation. This risk-averse mindset is counterproductive in environments that rely on quick iterations, such as Agile and DevOps frameworks, where rapid feedback cycles are essential for innovation.

Moreover, lengthy approval processes often remove the decision-making authority from the teams directly responsible for implementing the changes. This disconnect can lower team morale and lead to disengagement as teams feel they are not trusted to make decisions, even if they know the most about the systems they are working on.

1. **Limited Adaptability in Modern Workflows**

Another danger of traditional change approval processes is their incompatibility with modern workflows, particularly in organizations practicing Agile and DevOps. These methodologies emphasize collaboration, quick iterations, and continuous improvement. However, traditional change approval processes can slow the iterative process, resulting in bottlenecks preventing teams from delivering value quickly.

According to a study by IT Revolution (2019), companies using traditional approval processes need help keeping pace with the accelerated cycles of continuous integration and delivery (CI/CD). In these environments, the demand for quick changes means approval processes must be streamlined to avoid blocking progress. Slow approval times are especially detrimental in high-performing IT teams, where swift responses to customer needs and market changes are vital.

The rigidity of formal approval processes also makes it harder for teams to adapt to unexpected issues, such as system outages or security breaches. An overly complex approval process can prevent teams from deploying critical fixes in real-time, increasing the risk of prolonged downtime or further exploitation of vulnerabilities.

#### **Conclusion**

While change approval processes are essential for risk management, quality control, and compliance, they can pose significant dangers if not properly aligned with modern business practices. Bureaucratic delays stifled innovation, and limited adaptability are key risks hindering an organization's ability to remain competitive in a rapidly evolving marketplace. To mitigate these risks, organizations must rethink their change approval processes, focusing on agility and trust in team autonomy while maintaining the necessary checks and balances.

#### **References**

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