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Module 8.2 Assignment

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Change approval processes are designed to maintain stability and security in software development. However, they often introduce significant challenges that can hinder progress.

The first danger that immediately came to mind was that lengthy approval procedures can sometimes serve to slow down the release of new features, giving competitors an edge and frustrating end users who expect rapid updates. Studies have shown that bureaucratic change approvals are associated with worse software delivery performance, leading to increased time to market (Irfan et al., 2023).

As an Information Security professional, there is also an important call out that delays in the approval process can postpone the deployment of essential security patches and bug fixes. These delays leave systems and applications vulnerable to attacks and operational issues. Inefficient change management processes can increase the work in progress and delay time to market, exacerbating these vulnerabilities (Irfan et al., 2023). In sectors like healthcare, delayed security patches have been found to significantly increase the risk of cyberattacks, with organizations struggling to balance security and compliance requirements while adhering to slow, formal approval processes (Dissanayake et al., 2022).

Another concern is the tendency for application owners to rubber stamp change approvals. When approvals become mere formalities, the process fails to catch potential issues, undermining the entire purpose of change management. Research indicates that external approvals are negatively correlated with key performance metrics like lead time and deployment frequency, and have no measurable positive impact on change failure rates (Forsgren et al., 2018).

Research indicates that heavy-handed change management does not necessarily lead to more stable systems. In fact, studies have found that external approvals are negatively correlated with key performance metrics like lead time and deployment frequency, and have no positive impact on change failure rates (Forsgren et al., 2018). This suggests that cumbersome approval processes may do more harm than good, slowing down development without enhancing system reliability.

To address these challenges, many organizations are shifting towards more agile and automated approaches. By streamlining change approval processes and incorporating continuous integration and continuous deployment (CI/CD) practices, teams can reduce delays and improve both the speed and quality of software delivery. This transition aligns with findings that emphasize the importance of efficient change management in expediting time-to-market and enhancing overall performance (Irfan et al., 2023).

**Works Cited**

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