Root Cause Manifest

Summary

Engineering teams (approx. 1500 engineers) in Company X face significant challenges due to rapid organizational changes and a decentralized operational model. Fragmented information, communication gaps, and lack of governance hinder decision-making, collaboration, and efficiency. This results in duplicated efforts, decreased motivation, and suboptimal resource utilization.

To address these issues, a comprehensive approach is proposed:
1. Consolidate and centralize critical information into a unified, searchable knowledge base.
2. Establish a formal communication platform for changes and a feedback mechanism for employees.
3. Define and enforce clear governance standards within the decentralized model.
4. Develop a unified engineering platform strategy and automate governance, security, and compliance.
5. Revamp the IT Service Catalogue and foster a culture of knowledge sharing.

By treating information as code and embracing inner-sourcing, Company X can streamline operations, improve collaboration, and enhance its competitive edge. These actions will empower employees, ensure accurate information flow, and enable efficient decision-making in the face of continuous change.

Diagnose

- **Company X's organizational structure is in constant flux.** This dynamism necessitates a system that can adapt and evolve alongside the company's structure, ensuring information remains relevant and accessible.
- **Outdated documentation due to rapid organizational changes**. Current documentation practices struggle to keep pace with the company's evolution, resulting in information silos, duplicated efforts, and reliance on tribal knowledge.
- **Dispersed information across systems.** Critical information about organization, assets, products, ownership, accountability, policies, and governance is fragmented across various systems, making it difficult to locate and utilize effectively.
- **Inadequate search functionality and technical information.** Engineers struggle to find relevant information, leading to delays, increased effort, and reduced productivity.
- **Lack of centralized onboarding and resource hub.** Engineers lack a unified platform for onboarding, access to technical documentation, tools, systems, and team information, hindering their ability to ramp up quickly and contribute effectively.
- **No single communication channel for changes.** There's a lack of a centralized platform to communicate changes in assets, products, ownership, accountability, policies, and governance, leading to inaccurate or missed communication.

- **Absence of feedback and contribution loop.** Employees have no formal mechanism to provide feedback or contribute to updating information, perpetuating inaccuracies and leading to duplicated work, redundant efforts, and decreased motivation.
- **Decentralized DevOps model without proper governance.** While a decentralized model offers operational flexibility, the lack of governance leads to divergent approaches, increased complexity, and challenges in managing security and compliance at an organizational level.
- **Local changes increase complexity and workload.** The need for local teams to implement changes results in increased complexity and workload for both local and centralized (IT and Security) teams. This leads to a lack of ownership, accountability, and motivation, resulting in subpar decision-making, implementation, and execution.
- **Lack of common engineering technology platform strategy.** The absence of a unified strategy and platform for engineering teams leads to fragmented technology usage and governance challenges. This hinders the company's ability to respond to security and compliance requirements, utilize economies of scale with cloud providers, and automate policies and controls.
- **IT Service Catalogue failure.** The existing catalogue failed due to difficulties in updating information, lack of self-service/automation, and misalignment with the decentralized DevOps model.

Challenge[1]
- **Information fragmentation and accessibility:** The dispersed nature of critical information and the lack of effective tools to access it hinder decision-making, collaboration, and productivity.
- **Communication and change management:** The absence of a centralized communication platform and feedback loop for changes leads to misinformation, duplicated efforts, and decreased motivation.
- **Governance and standardization in a decentralized model:** The decentralized DevOps model necessitates a robust governance framework to ensure consistency, security, compliance, and efficient resource utilization.

Guiding Policy[2]

- **Treat information as code:** Manage documentation, assets, policies, controls, security, compliance, and governance information using a version-controlled, code-like approach (e.g., GitFlow).
- **Foster inner-sourcing:** Encourage collaboration and knowledge sharing across teams through an inner-sourcing model, where employees can contribute to and improve documentation and processes without manual gatekeeping.

Co-herent Actions

- **Implement a centralized knowledge base:** Consolidate critical information (organization, assets, products, ownership, accountability, policies, governance) into a unified, searchable platform.
- **Establish a change communication platform:** Create a centralized channel (e.g., a dedicated Slack channel, internal newsletter) to communicate changes effectively, ensuring all employees are aware of updates and their implications.

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[1] Select 1 challenge, 1 policy and a set of clear actions which address this policy

[2] A good strategy normally has a single guiding policy. This document is a summary of the Root Cause workshop which includes the challenges and policies which where identified during the workshop. Considering the scope and complexity it is advised to choose & address a single challenge first.

- **Develop a feedback and contribution mechanism:** Implement a system (e.g., a feedback form, wiki-style editing) allowing employees to provide feedback, suggest updates, and contribute to the knowledge base.
- **Define and enforce governance standards:** Establish clear guidelines, policies, and procedures for technology usage, security, compliance, and development processes within the decentralized DevOps model.
- **Create a common engineering platform roadmap:** Develop a unified strategy and roadmap for a shared engineering platform, promoting standardization, collaboration, and efficient resource utilization.
- **Automate governance, security, and compliance:** Implement automated checks and controls within the development pipeline (e.g., code reviews, security scans) to ensure adherence to standards and reduce manual effort.
- **Revamp the IT Service Catalogue:** Redesign the catalogue to be user-friendly, easily updatable, and integrated with self-service/automation capabilities. Align it with the decentralized DevOps model by providing guidance and solutions for tool adoption and implementation.
- **Foster a culture of knowledge sharing:** Encourage and incentivize employees to share knowledge, contribute to documentation, and participate in inner-sourcing initiatives.
- Invest in search and discovery tools: Enhance search functionality within the knowledge base and provide tools (e.g., AI-powered recommendations) to help engineers quickly find relevant information.
- **Establish clear ownership and accountability:** Assign clear ownership and accountability for different areas of the knowledge base, ensuring information is regularly updated and maintained.

Additional notes / recommendations

This is a company wide strategy with an engineering team size of approx 1500 engineers. Each co-herent action is a program in itself and will take considerable time and effort over a sustained amount of time to implement.

Implementing these transformative changes at Company X will require a phased approach, prioritizing the most impactful actions while minimizing disruption. The initial focus should be on centralizing critical information and establishing effective communication channels. This involves creating a unified knowledge base, implementing a change communication platform, and developing feedback mechanisms. Simultaneously, clear governance standards should be defined and gradually enforced within the decentralized DevOps model. In subsequent phases, efforts can shift towards developing a common engineering platform roadmap and automating governance, security, and compliance processes. Throughout the process, it's crucial to foster a culture of knowledge sharing and empower employees to contribute to the evolution of the company's information ecosystem. By tackling these challenges incrementally and strategically, Company X can ensure a smooth transition, minimize resistance, and maximize the benefits of these changes.

Knowledge resource recommendations
- https://innersourcecommons.org/learn/books/
- https://teamtopologies.com/book
- https://itrevolution.com/product/accelerate/
- https://www.oreilly.com/library/view/software-engineering-at/9781492082781/
- https://www.amazon.com/dp/B07QYCHJ7V/