

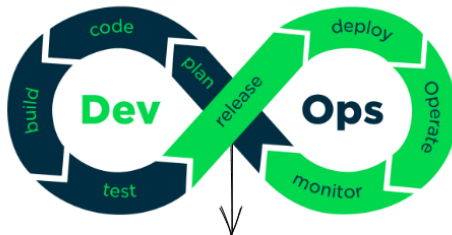
Strategies for Promoting Releases in GitOps Environments

Master Thesis

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Research Area



Problem Description



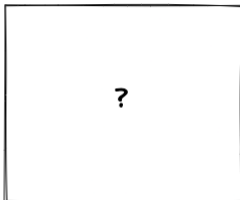
Proposed Solution



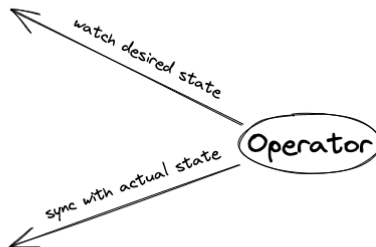
Custom Resource Definition (CRD)

```
apiVersion: toolkit.gitops.io/v1
kind: Environment
metadata:
  name: staging
  namespace: default
spec:
  sourceRef:
    kind: GitRepository
    name: gitops-repo
    type: kustomization
    path: "./environments/staging"
```

desired state



actual state



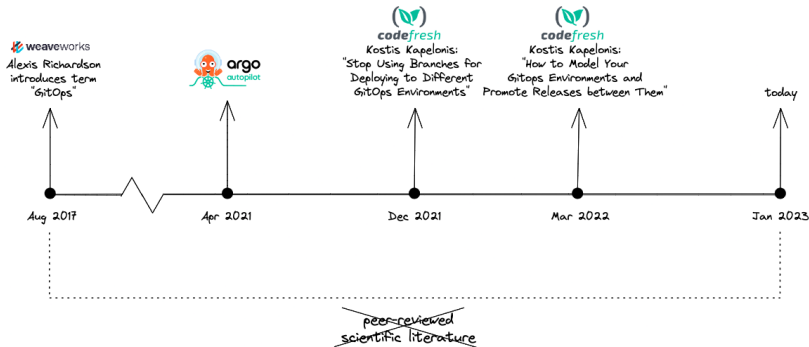
Big Picture



release promotion
operator

master thesis

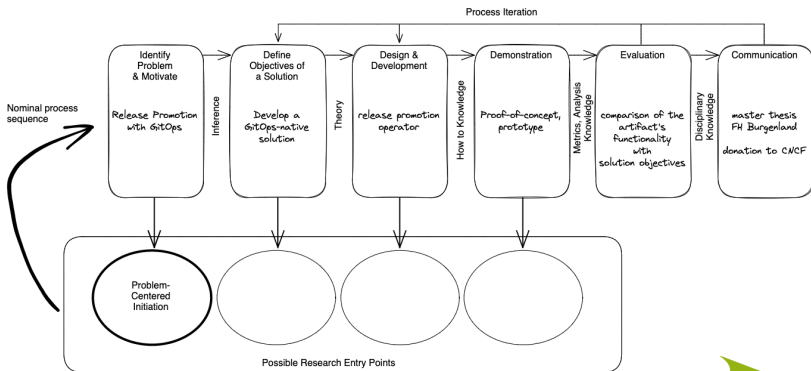
Related Work



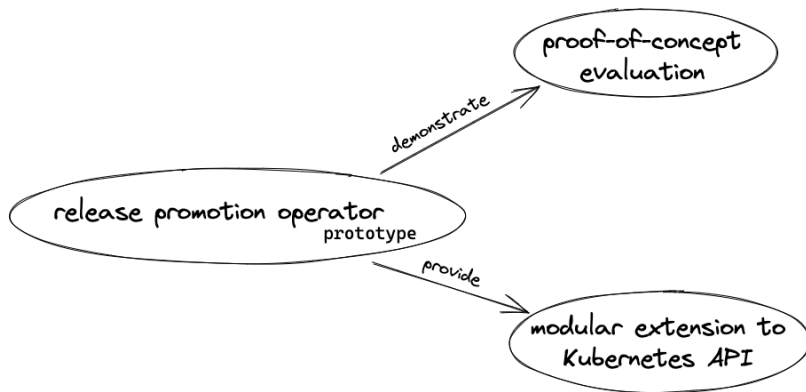
Research Questions

- ▶ How can the promotion of releases in GitOps environments be designed?
 - ▶ What possibilities do existing tools offer for the promotion of releases with multiple deployment environments?
 - ▶ How can deployment environments, as well as promotion processes be modeled abstractly?
 - ▶ How can abstract modeling be used to implement a standardized solution for promoting releases?

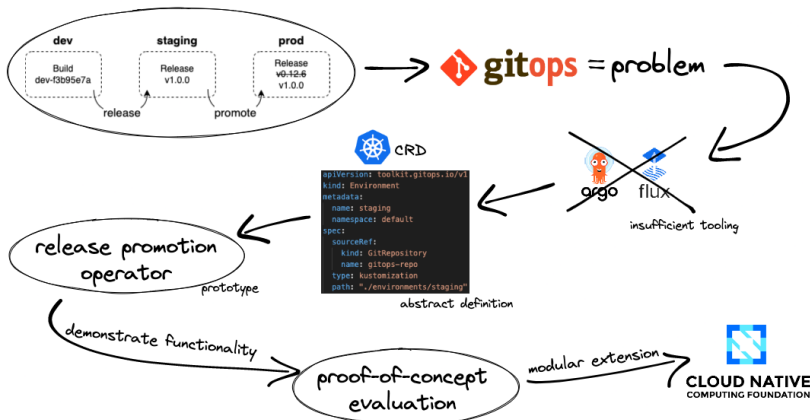
design science research in information systems (Peffers et al., 2007)



Results



Conclusion



Future Work

