

**MICHIGAN STATE**  

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**U N I V E R S I T Y**

# Beta Presentation

Governance of Expense in Kohl's Cloud Operations

The Capstone Experience

Team Kohl's

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*From Students...  
...to Professionals*

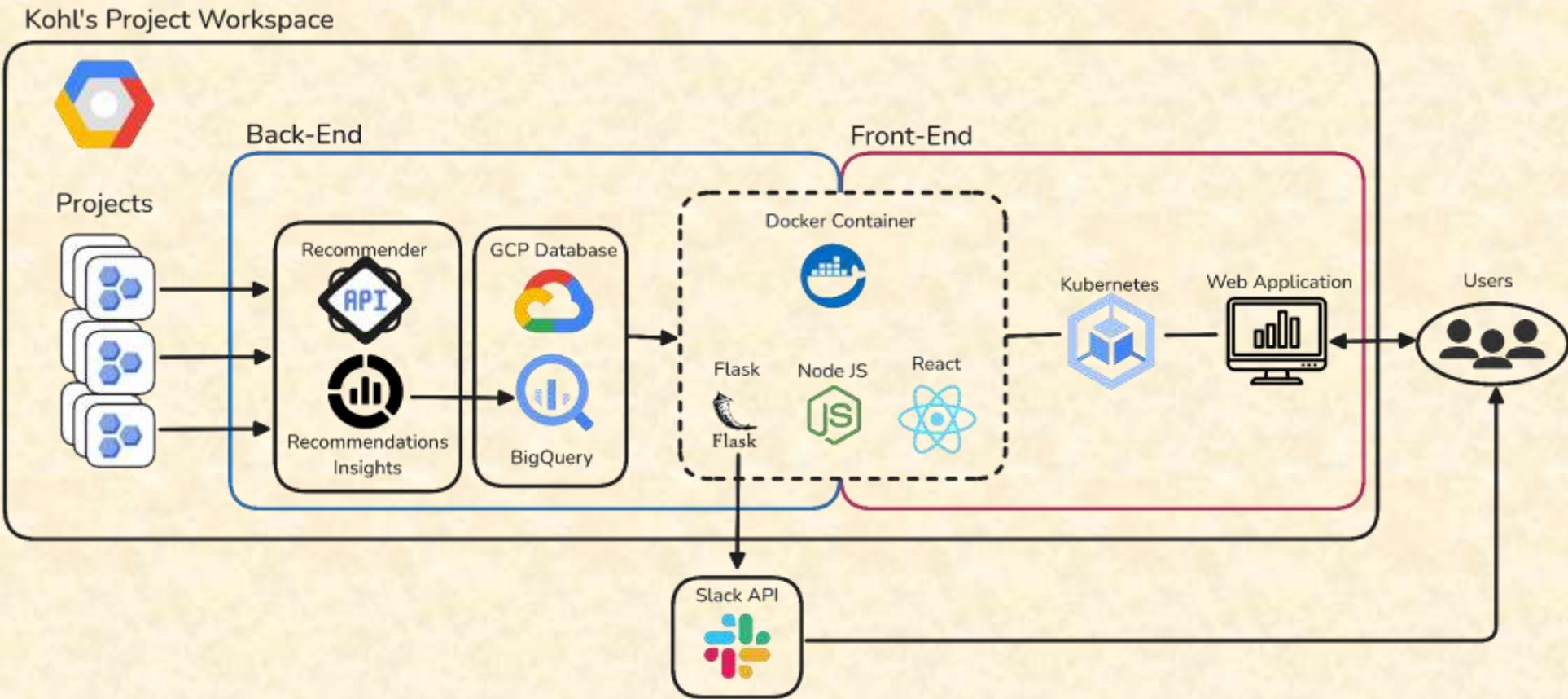
# Project Overview

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- Sponsor: Kohl's
- Unoptimized GCP spending and usage
- Identify and rectify inefficiencies in Kohl's Cloud Operations (G.E.K.C.O)
- Monitoring & Alerting Platform
  - Analyze cloud expenses and usage on demand across Kohl's project space
  - Send notifications utilizing Slack API



# System Architecture



# Dashboard



# Dashboard in Dark Mode

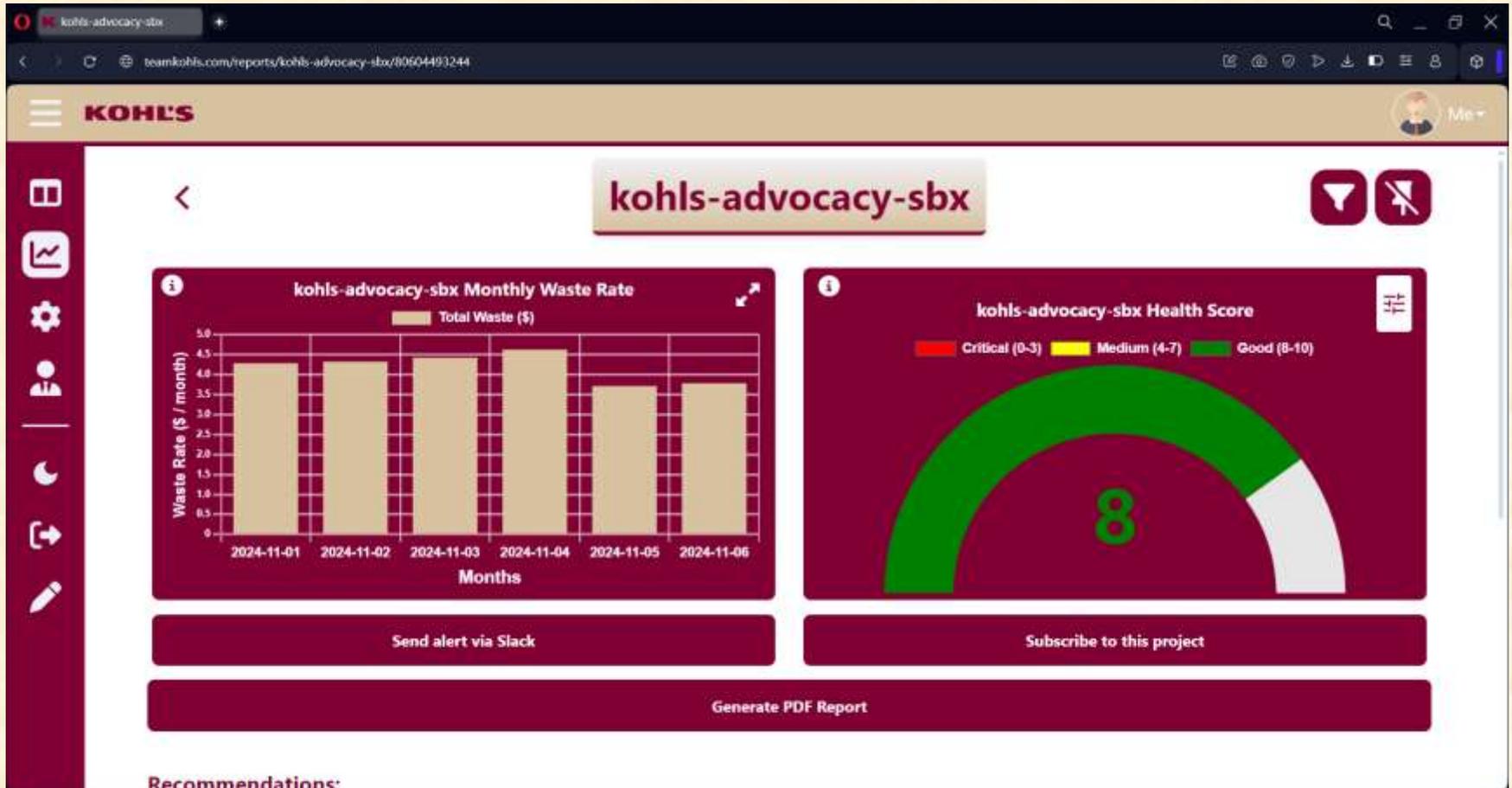


# Project Reports List

Project Name/Id	Current Waste Rate	Security Concerns	Total Inefficiencies
kohls-advocacy-sbx	\$3.78	1	10
kohls-bda-dse-ile	\$67.77	0	12
kohls-bda-mkt-ile	\$17.96	2	4
kohls-cce-dbaas-ile	\$1779.33	1	5
kohls-cce-dbaas-prd	\$0	1	2
kohls-cce-openshift-ile	\$4.85	1	16



# Project Report



# Project Report Recommendations

The screenshot shows a web browser window with the URL `teamkohls.com/reports/kohls-advocacy-sbx/00604401244`. The page header includes the KOHL'S logo and a user profile icon labeled 'Me+'. A sidebar on the left contains navigation icons for home, analytics, settings, users, and a search icon.

**Recommendations:**

Select All  Cost  Performance  Reliability  Security

**Save cost by snapshotting and then deleting idle persistent disk 'pvc-4620c861-4b4a-4152-a985-341142414b8a'.**

**Category:** COST  
**Type:** IDLE\_DISK  
**Description:** Disk 'pvc-4620c861-4b4a-4152-a985-341142414b8a' in zone 'us-central1-c' was last used 921 days ago. Consider taking snapshot and delete it.  
**Severity:** LOW

**Save cost by snapshotting and then deleting idle persistent disk 'pvc-c6ecd3b-eaf5-47d7-9c83-40fe4edd7f28'.** +

**Save cost by snapshotting and then deleting idle persistent disk 'pvc-dff78ea0-ebb4-4258-a933-8ad77f02e42f'.** +

**Save cost by snapshotting and then deleting idle persistent disk 'pvc-6b404978-c060-4335-945c-81b704470c4a'.** +

**Save cost by snapshotting and then deleting idle persistent disk 'pvc-ca710a1b-6164-4362-8dd3-8f58c9793836'.** +

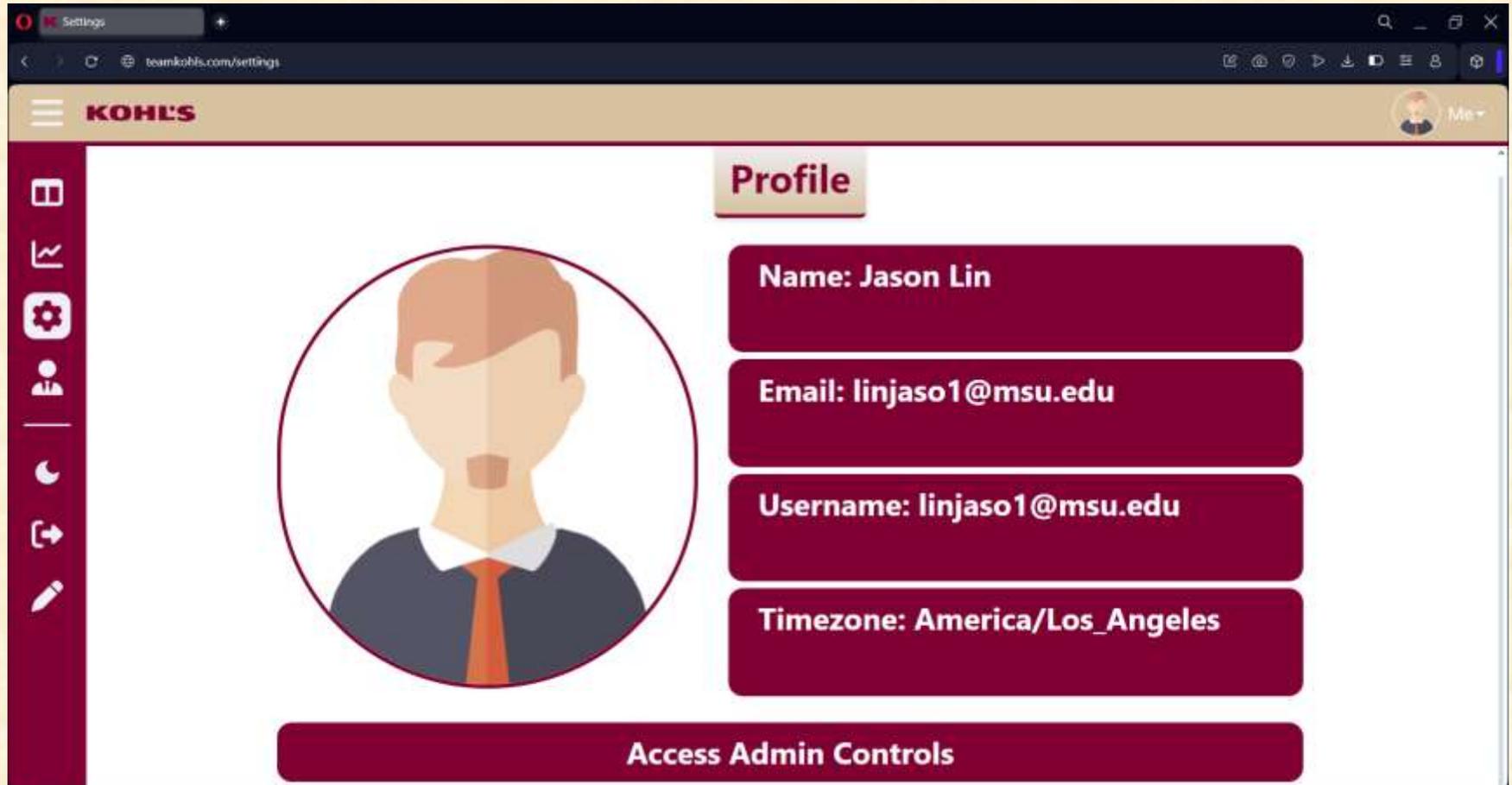
**Save cost by snapshotting and then deleting idle persistent disk 'pvc-48eb9ade-fc32-4dae-a0c7-e9aae694372a'.** +

**Save cost by snapshotting and then deleting idle persistent disk 'pvc-74ae8046-d192-4040-ab78-3d618a39e272'.** +

**Save cost by snapshotting and then deleting idle persistent disk 'pvc-5a0505ae-dc1a-4971-b088-c735fe58f893'.** +



# Profile Page



# Admin Dashboard

The screenshot displays the Kohl's Admin Dashboard in a web browser. The browser's address bar shows the URL `teamkohls.com/admin`. The dashboard header includes the Kohl's logo and a user profile icon labeled "Me".

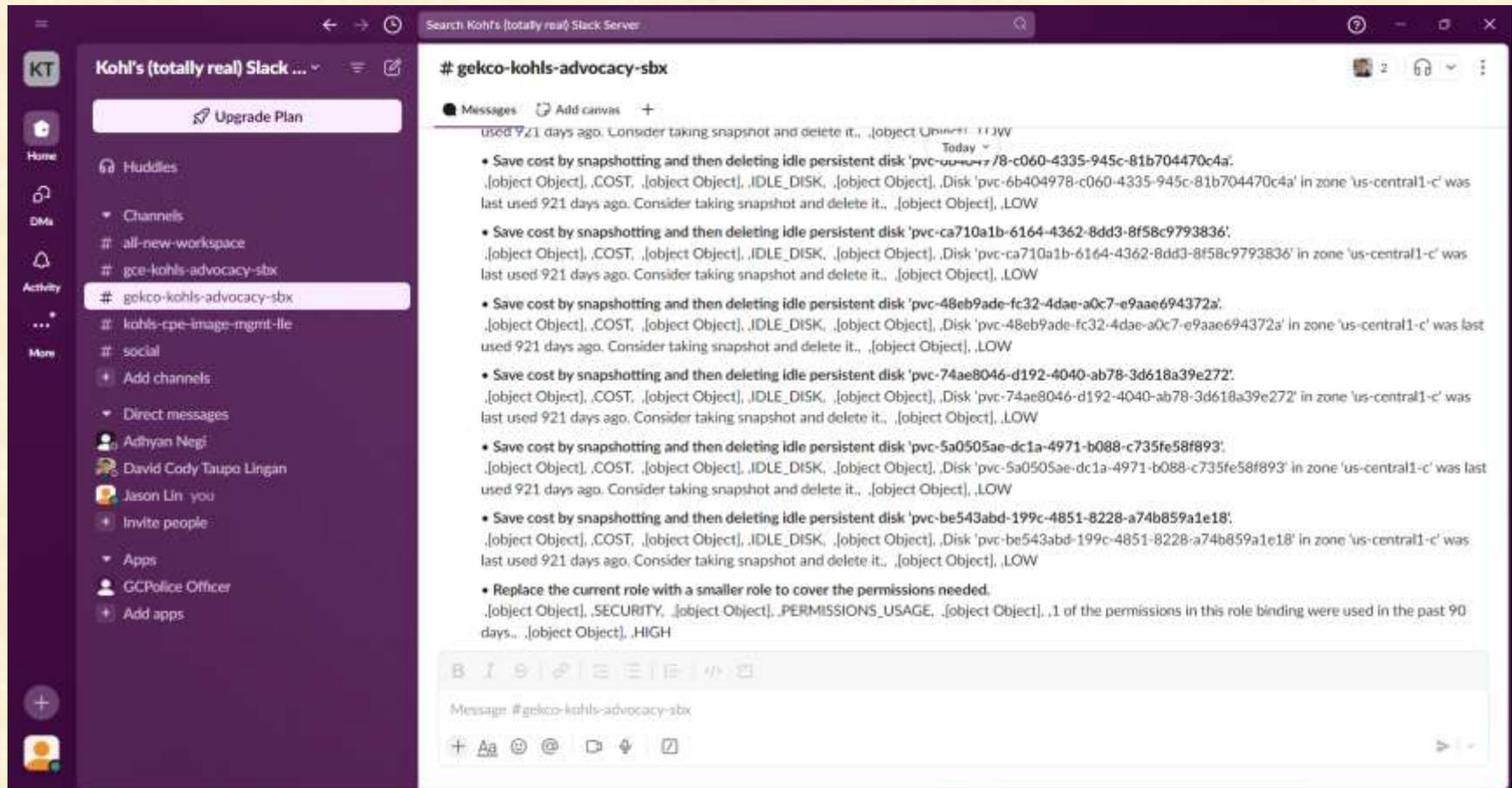
The main content area is titled "Admin Dashboard" and features three primary sections:

- Slack Adjust:** A dark red card displaying a large green number "3" and the text "# of Channels".
- Slack Channels:** A dark red card containing a list of three Slack channel names: `gekco-kohls-bda-mkt-llc`, `gekco-kohls-advocacy-sbx`, and `gekco-kohls-cce-openshift-prd`.
- Recommended Actions:** A section with the heading "Recommended Actions" containing three dark red cards, each with the text "Purchase a 1 year new standard CUD for E2RAM memory" or "Purchase a 1 year new standard CUD for C2DCore CPU" and a small white plus icon on the right.

A vertical sidebar on the left side of the dashboard contains several navigation icons, including a calendar, a line graph, a gear, a person, a moon, a refresh symbol, and a pencil.



# Slack Channel for Specific Project



The screenshot displays a Slack workspace interface. On the left sidebar, the workspace is named "Kohl's (totally real) Slack ...". Below the workspace name, there is an "Upgrade Plan" button. The sidebar lists several channels, with "# gekco-kohls-advocacy-sbx" selected and highlighted. Other channels include "all-new-workspace", "gce-kohls-advocacy-sbx", "kohls-cpe-image-mgmt-ile", and "social".

The main content area shows the "# gekco-kohls-advocacy-sbx" channel. The channel header includes a search bar with the text "Search Kohl's (totally real) Slack Server". Below the header, there are options for "Messages" and "Add canvas". The channel contains a list of messages, each starting with a bullet point and a bolded title: "Save cost by snapshotting and then deleting idle persistent disk". Each message body contains technical details, including disk IDs, costs, and permissions. The messages are dated "921 days ago".

The bottom of the screenshot shows the Slack message input area, including a text input field, a "Message" button, and various formatting and utility icons.



# What's left to do?

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- Features
  - Minor UI Tweaks
- Stretch Goals
  - Deploying within Kohl's Space
    - Implementing "Ignore Recommendations" within Kohl's

# Questions?

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