



# Ten years securing cloud transformation in Hollywood



**Toby Scales**

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## **Currently:**

Senior Advisor for Media, Entertainment and Gaming

## **Former:**

Senior Cloud Specialist, Media & Entertainment @ Google

Senior Cloud Architect @ Microsoft

Systems Architect @ OmnicomMediaGroup

## **Recent favorites:**

Dream Scenario, Civil War, Rumours

## **My personal GOATs:**

Fellini, Coen Brothers, Spielberg



# KNIGHT RIDER

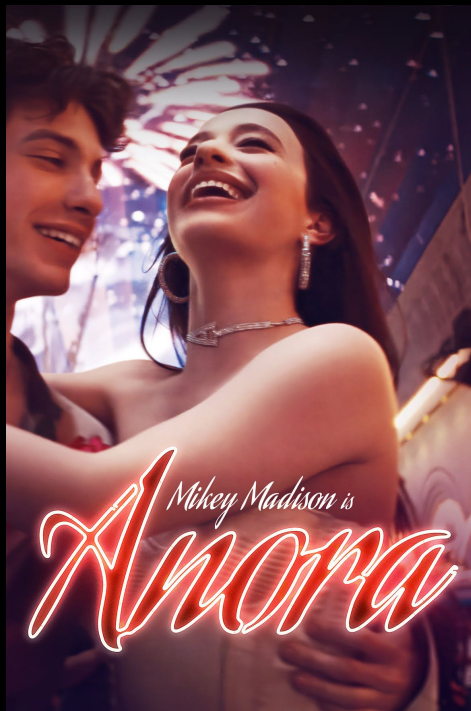


“A triumph!”

“Shrewd and well-executed.”

“Powerful and moving”

“Deeply insightful”



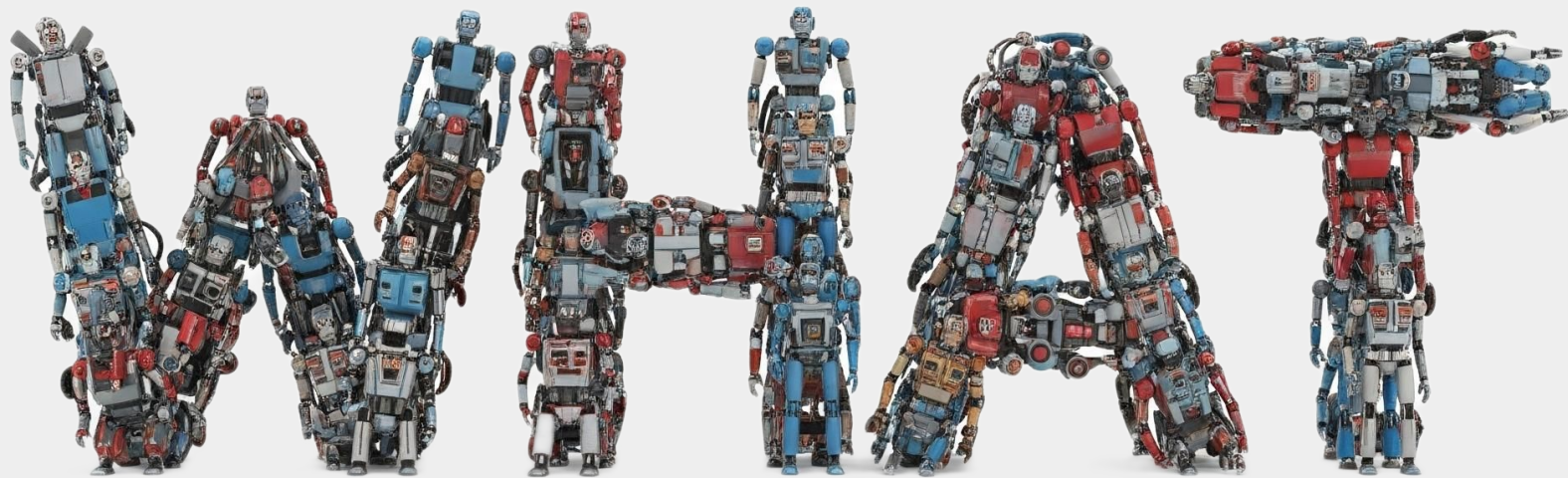
“★★★★★”

“A sure-fire winner”

“Astonishing”

“Heartbreaking and simple”

AI WTF ??



AI is an interface for your data



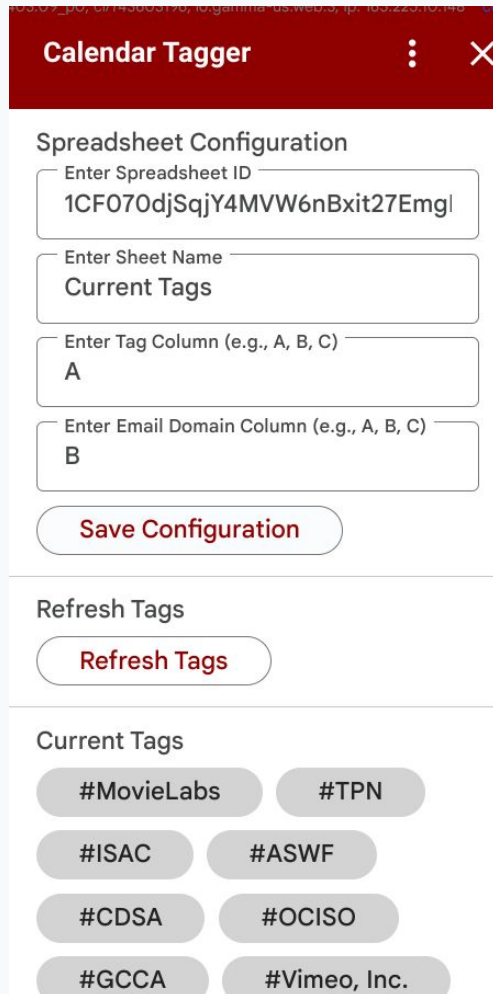
# AI is a developer for everyone





# Add-on Development

- From concept to completed add-on in just 4 days.
- Zero prior knowledge of Google Apps Script, limited documentation available on the web.
- Inspired by the “write better code” post by Max Woolf:  
<https://minimaxir.com/2025/01/write-better-code/>



The screenshot shows the 'Calendar Tagger' configuration window. It has a red header bar with the title 'Calendar Tagger' and a close button. Below the header, there's a 'Spreadsheet Configuration' section with four input fields: 'Enter Spreadsheet ID' (containing '1CF070djSqjY4MVW6nBxit27Emgl'), 'Enter Sheet Name' (containing 'Current Tags'), 'Enter Tag Column (e.g., A, B, C)' (containing 'A'), and 'Enter Email Domain Column (e.g., A, B, C)' (containing 'B'). A 'Save Configuration' button is at the bottom of this section. Below that is a 'Refresh Tags' section with a 'Refresh Tags' button. At the bottom is a 'Current Tags' section displaying a grid of tag buttons: #MovieLabs, #TPN, #ISAC, #ASWF, #CDSA, #OCISO, #GCCA, and #Vimeo, Inc.

Calendar Tagger

Spreadsheet Configuration

Enter Spreadsheet ID  
1CF070djSqjY4MVW6nBxit27Emgl

Enter Sheet Name  
Current Tags

Enter Tag Column (e.g., A, B, C)  
A

Enter Email Domain Column (e.g., A, B, C)  
B

Save Configuration

Refresh Tags

Refresh Tags

Current Tags

#MovieLabs #TPN

#ISAC #ASWF

#CDSA #OCISO

#GCCA #Vimeo, Inc.

# Code Refactoring

Can you clean up this query?

I only need it to show accounts where the customer\_parent\_industry matches 'Telecommunications, Media & Gaming'. Please optimize it so it runs more efficiently, and document thoroughly any changes you make so I can understand.

Also be sure to add comments into the code.

```
EXPORT DATA OPTIONS(
  format = 'xlsx',
  url_or_path = 'https://docs.google.com/spreadsheets/d/1POIGCHV5Xaanra6UoVnBb1KrW04JxUIKQ3Yan5r_as/edit?resourcekey=0-85QyX
  header = TRUE,
  worksheet = 'Sheet2',
  overwrite_worksheet = TRUE,
  order_by = 'request_created_date DESC'
) AS

SELECT DISTINCT
  request_title,
  request_id,
  request_created_date,
  request_status,
  email as request_owner, -- Corrected: Use the alias from the 'requests' CTE
  customer_id,
  customer_name,
  customer_industry,
  customer_sub_industry,
  customer_region,
  request_type_tier1,
  request_is_AI,
  request_workshop,
  requestor,
  field_survey_sent,
  customer_survey_sent,
  customer_survey_link,
  customer_survey_link_obfuscated,
  internal_survey_link,
  internal_survey_link_obfuscated,
  customer_country,
  customer_parent_name,
  customer_parent_is_targeted,
  customer_parent_id,
  opportunity_name,
  opportunity_status

FROM (

WITH
  //Get all Enterprise Trust Navigate ERs
  requests AS (
    SELECT
      id AS request_id,
      name AS request_title,
      export_team_c AS request_team,
      DATE(TIMESTAMP_MILLIS(sfdc.created_date)) AS request_created_date,
      EXTRACT(YEAR FROM TIMESTAMP_MILLIS(sfdc.created_date)) AS request_year,
      sfdc_last_modified_time AS request_last_modified_date,
      sla_missed_c AS request_sla_missed,
      sfdc_created_by_id,
      owner_id,
      CASE
        --Legacy Enterprise Trust engagement types
        WHEN regexp_contains(engagement_type_c, 'Trust Support') THEN 'Field Enablement (Compliance)'
        WHEN regexp_contains(engagement_type_c, 'Trust Governance & Reviews') THEN 'Security Consultation'
        WHEN regexp_contains(engagement_type_c, 'Trust Field Enablement') THEN 'Field Enablement (Compliance)'
        WHEN regexp_contains(engagement_type_c, 'Trust Briefings') THEN 'EBC Support'
        WHEN regexp_contains(engagement_type_c, 'Trust Advisory and Collaborations') THEN 'Customer Workshops / Modules'
        --Legacy OCISO engagement types
        WHEN regexp_contains(engagement_type_c, 'Account Planning / GDR') THEN 'Internal Advisory Engagement'
        WHEN regexp_contains(engagement_type_c, 'Internal - Speaking Engagement') THEN 'Internal Speaking Engagement'
        WHEN regexp_contains(engagement_type_c, 'Internal - Advisory Engagement') THEN 'Internal Advisory Engagement'
        WHEN regexp_contains(engagement_type_c, 'EBC') THEN 'EBC Support'
        WHEN regexp_contains(engagement_type_c, 'Event Speaker') THEN 'External Speaking Event'
        WHEN regexp_contains(engagement_type_c, 'Executive Sponsorship') THEN 'OCISO or Executive Sponsorship'
        WHEN regexp_contains(engagement_type_c, 'Incident Support') THEN 'Security Consultation'
        WHEN regexp_contains(engagement_type_c, 'Single Engagement') THEN 'Security Consultation'
        WHEN regexp_contains(engagement_type_c, 'Security Consultation') THEN 'Security Consultation'
        WHEN regexp_contains(engagement_type_c, 'Product Discovery') THEN 'Internal Advisory Engagement'
        WHEN regexp_contains(engagement_type_c, 'Workshop') THEN 'Customer Workshops / Modules'
        WHEN regexp_contains(engagement_type_c, 'External / Industry - Other Media') THEN 'External Event Support'

        --Removing prefixes like 'Customer -'
        WHEN regexp_contains(engagement_type_c, 'Leadership Engagement') THEN 'Security Consultation'
        WHEN regexp_contains(engagement_type_c, 'Group Engagements / Events') THEN 'External Event Support'
        WHEN regexp_contains(engagement_type_c, 'Advisory Engagement') THEN 'Advisory Engagement'
        WHEN regexp_contains(engagement_type_c, 'Field Enablement \\(Compliance\\)') THEN 'Field Enablement (Compliance)'
        WHEN regexp_contains(engagement_type_c, 'Field Enablement \\(Security\\)') THEN 'Field Enablement (Security)'
        WHEN regexp_contains(engagement_type_c, 'Speaking Events') THEN 'External Event Support'
        WHEN regexp_contains(engagement_type_c, 'OCISO Customer Advocacy Program Events') THEN 'External Event Support'
        WHEN regexp_contains(engagement_type_c, 'Regulatory Engagements') THEN 'External Event Support'
      ELSE engagement_type_c
    )
  )
```

Okay, I've cleaned up and optimized your query. Here's the improved version, along with detailed explanations and comments:

SQL



```
EXPORT DATA OPTIONS(  
  format = 'CSV', -- Changed format to 'CSV' as it is more efficient than 'trix'  
  url_or_path = 'gs://[YOUR_BUCKET_NAME]/[YOUR_FOLDER]/telecom_media_gaming_accounts.csv',  
  header = TRUE,  
  overwrite = TRUE -- Changed to overwrite at the file level, rather than worksheet  
) AS  
  
WITH  
  -- CTE for active commits in GCC  
  active_commits AS (  
    SELECT  
      reporting_id AS customer_parent_id,  
      SUM(tcv) AS customer_parent_total_tcv,  
      SUM(acv) AS customer_parent_total_acv  
    FROM
```

## 1. Filtering Early for Telecommunications, Media & Gaming :

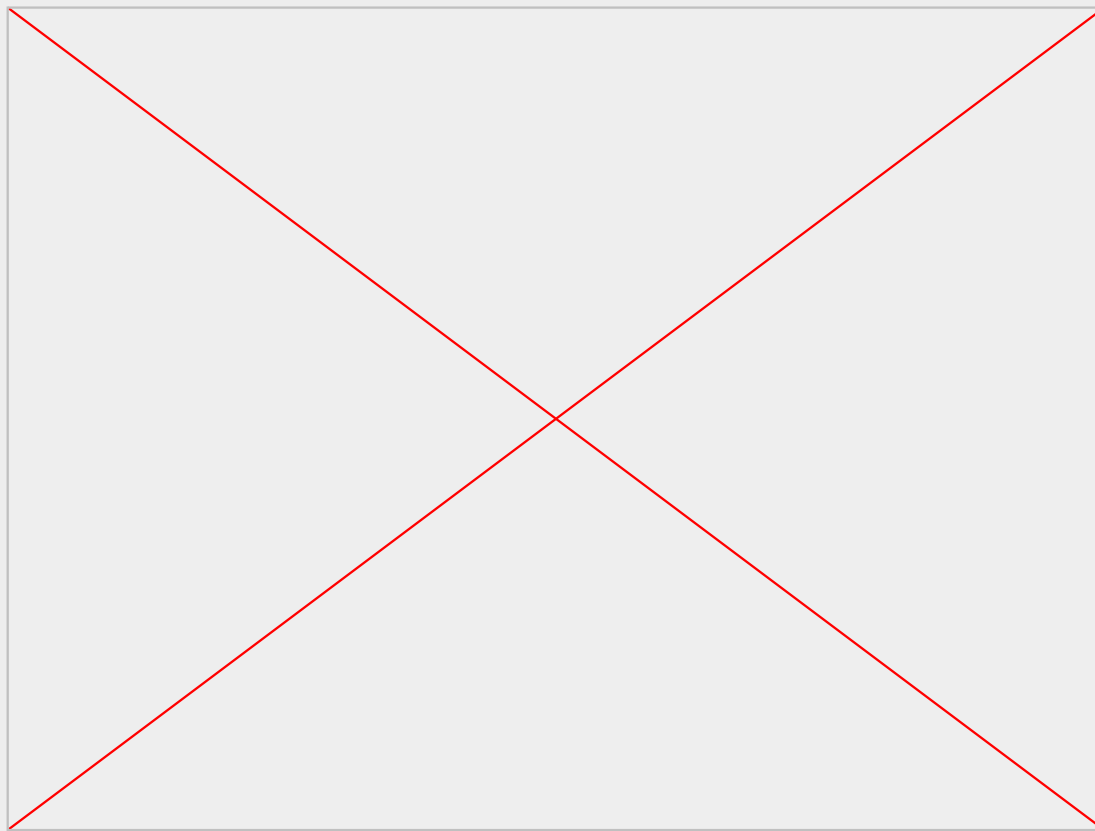
- Moved the `WHERE customer_parent_industry = 'Telecommunications, Media & Gaming'` clause into the new `priority_accounts` CTE. This is a crucial optimization. By filtering early, we significantly reduce the number of rows processed in subsequent joins and calculations. This is much more efficient than filtering at the end.

## 2. Simplified CTEs and Reduced UNION ALL Operations:

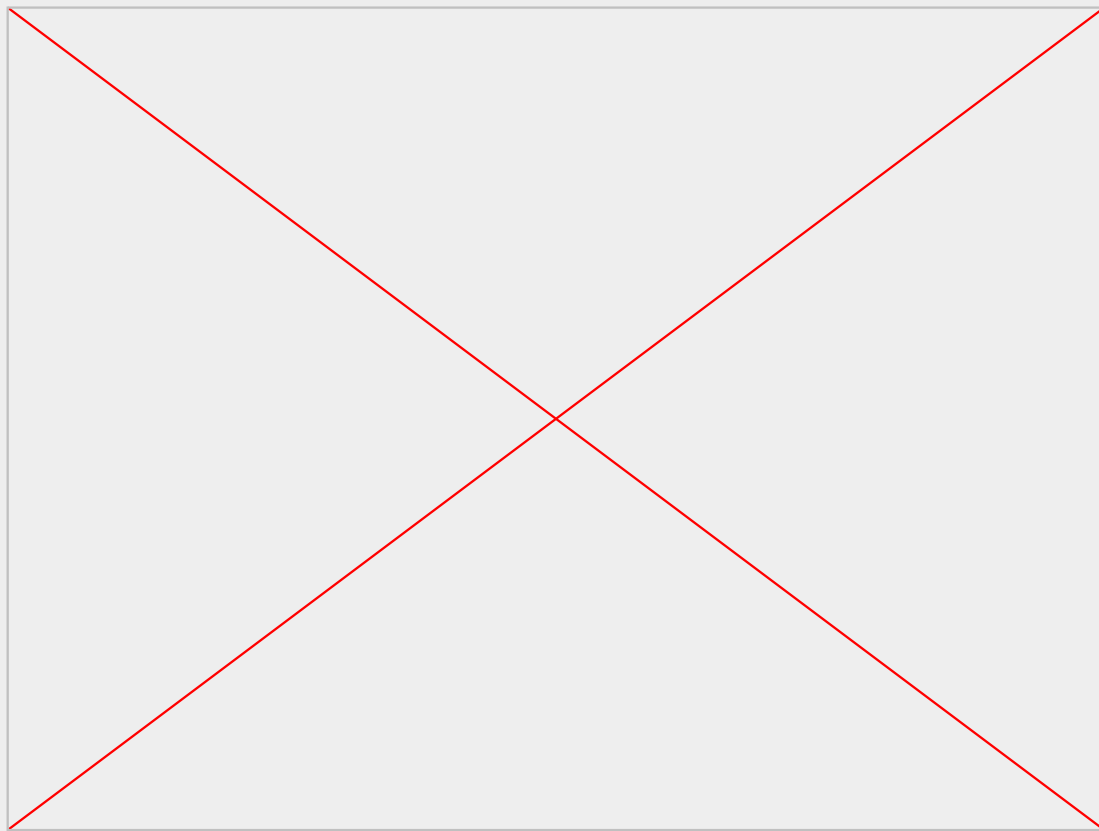
- Combined `big_tcv_customer` and `big_acv_customer` CTEs into a single `active_commits` CTE to calculate `customer_parent_total_tcv` and `customer_parent_total_acv` in one step, reducing redundant code and table scans.
- Simplified logic for determining `customer_parent_big_acv` and moved the complex `CASE` statement into the main query to avoid repeated calculations in a separate CTE.
- Removed the large `UNION ALL` section in the original query used to define priority accounts. The logic is now integrated into the `priority_accounts` CTE using `OR` conditions based on segment, GSI status, TCV, and ACV thresholds. This greatly simplifies the query and improves readability.



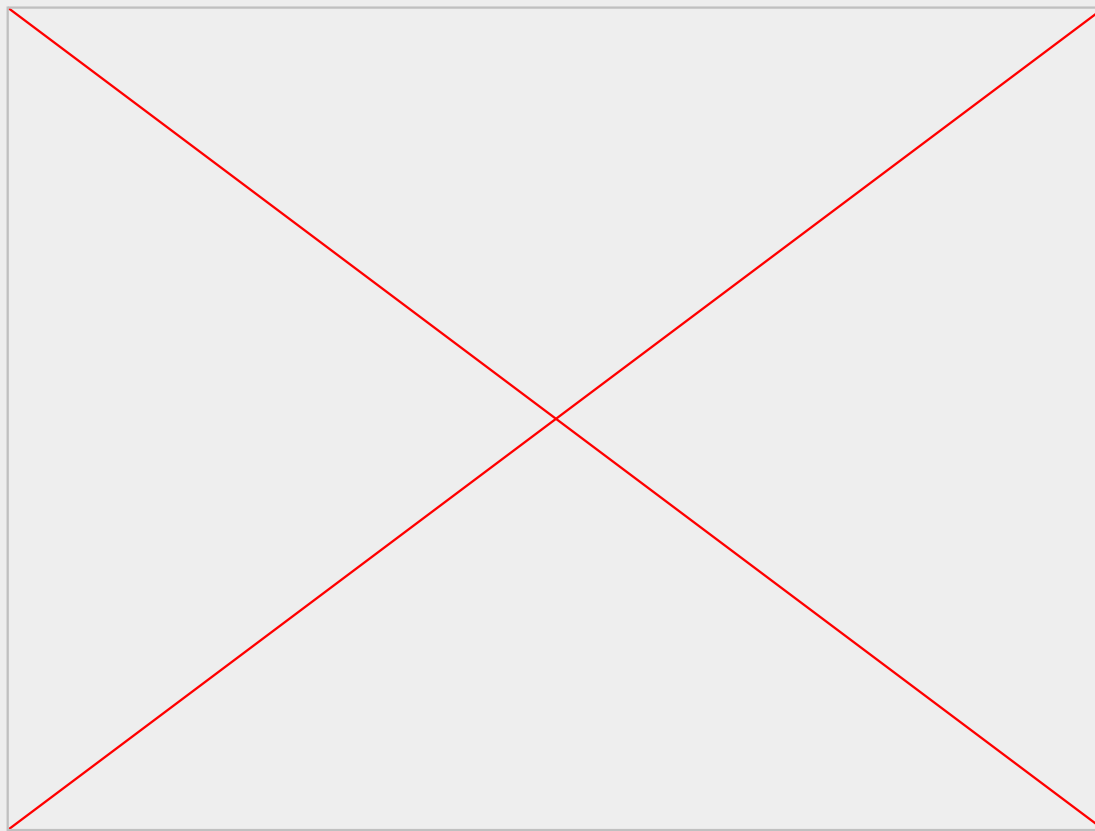
Before 2005



In 2025

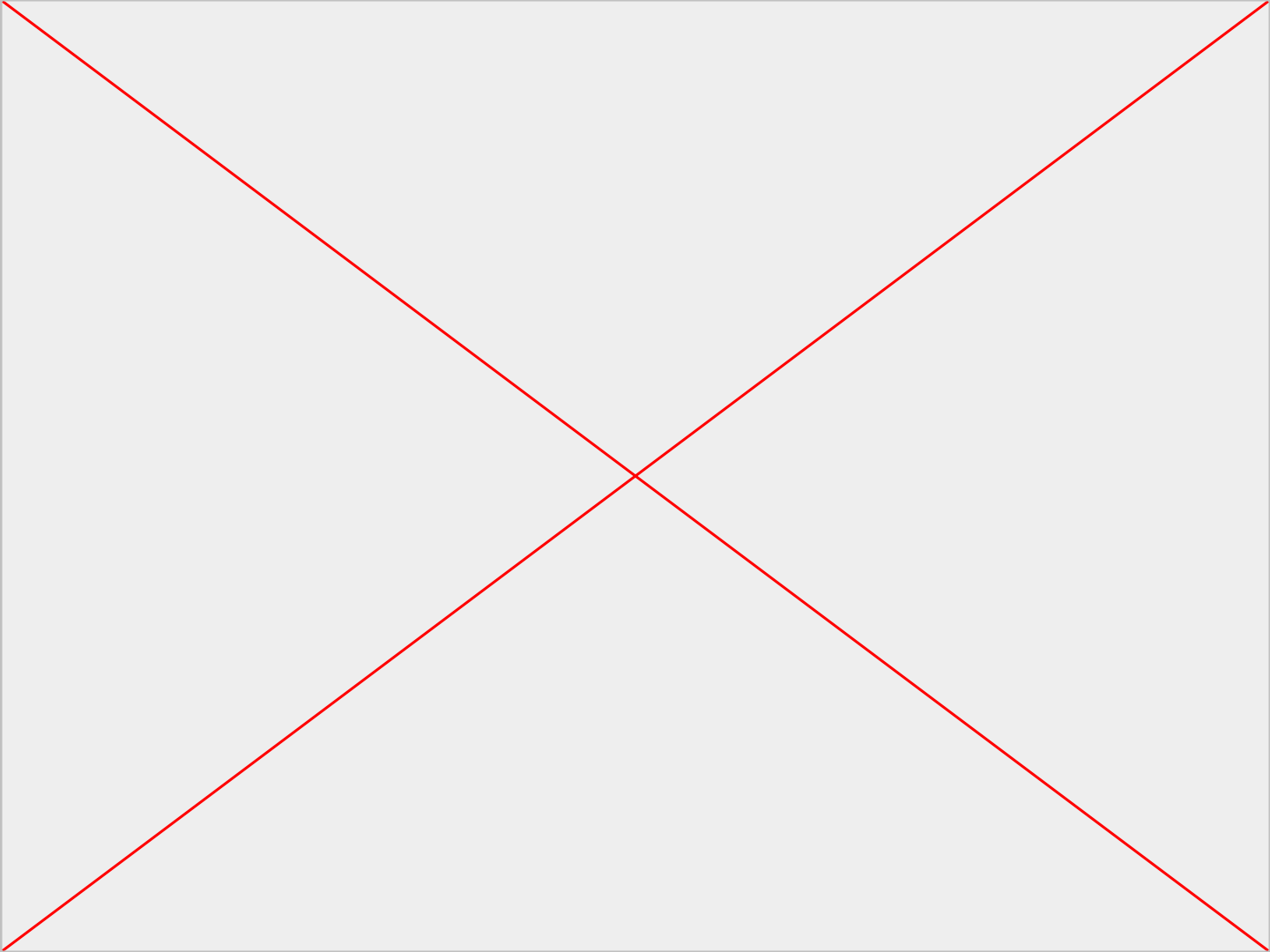


After 2025?











# Why? Meet M-Trends

- 16th edition of the annual thought leadership report authored by a dedicated team of experts
- Detailed insights into key security metrics from over 450K hours of incident response (IR) engagements.
- Mandiant IR investigations, service engagements, and threat intelligence analysis between Jan. 1, 2024 - Dec. 31, 2024



# Global Median Dwell Time

Adversary notifications originate from extortion actors who benefit from monetizing intrusions quickly.

Median Dwell Time in days, 2011- 2024

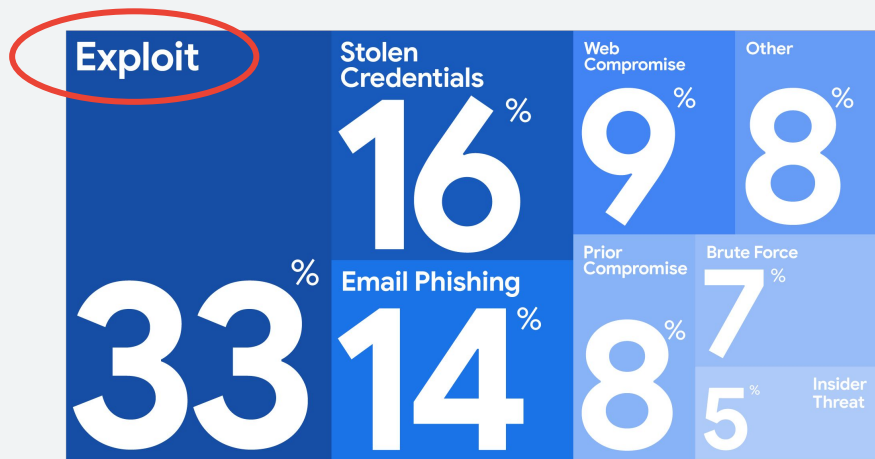
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
All	416	243	229	205	146	99	101	78	56	24	21	16	10	11

Median Dwell Time by Detection Source, 2024

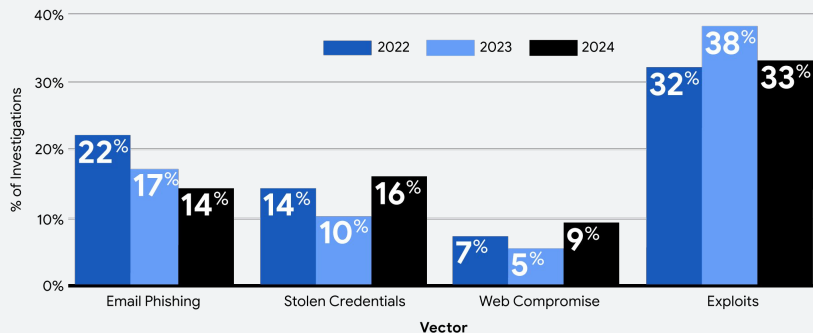
	2024
All	11
Adversary	5
External Entity	26
Internal	10

# Initial Infection Vector

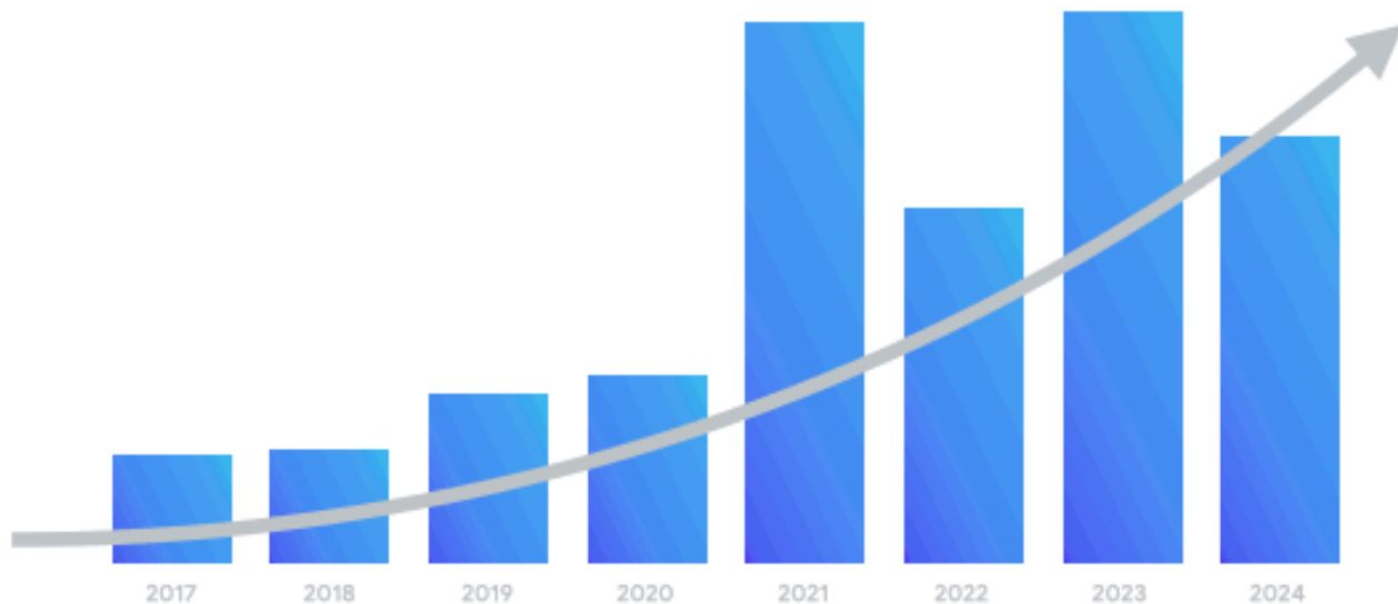
The continued prevalence of phishing and credential theft underscores the importance of implementing MFA, preferably FIDO2-compliant MFA methods.



## Phishing Declines as an Initial Infection Vector, 2022-2024



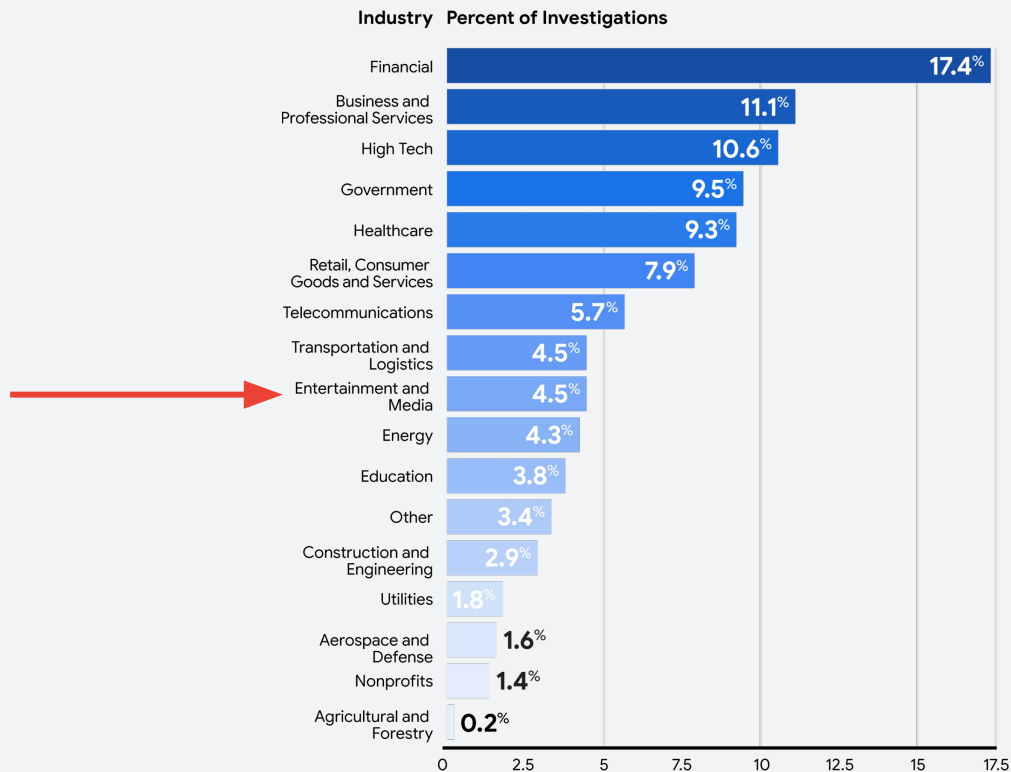
# Zero day exploits trending up



**Zero day exploits per year**

Increasing impacting a wide range of technologies

# Targeted Industries



# Where we are, where we're going



## Manual

Humans cyclically and routinely execute tasks



## Assisted

AI boosts productivity by generating summaries, recommendations, etc.



## Semi-autonomous

AI agents drives most tasks consistently well, delegating tasks it can't automate



## Autonomous

AI drives the security lifecycle to positive outcomes on behalf of users



# Meet our Gemini in Security agents

**Alert triage  
agent**

Google SecOps

**Malware analysis  
agent**

Google Threat Intelligence



# Step One



## Step Two

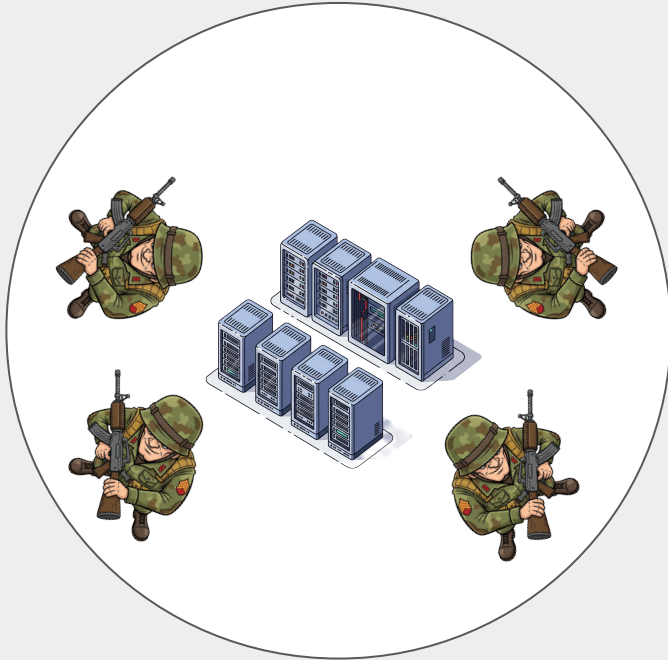




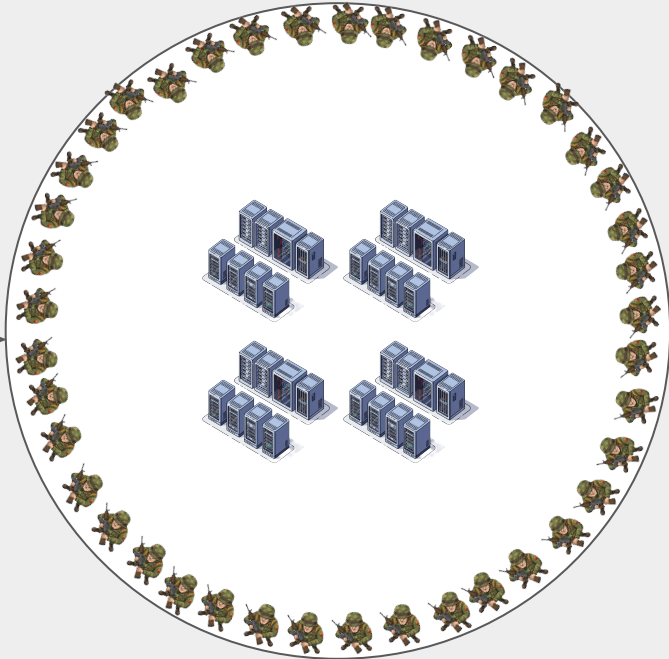
## Step Three



## Your Datacenter



## Cloud Datacenter



Shared Responsibility

# Shared Fate





Toby Scales

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# Thank you



Office of the CISO

Google Cloud