

# TabAssist

## Chrome Extension

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01

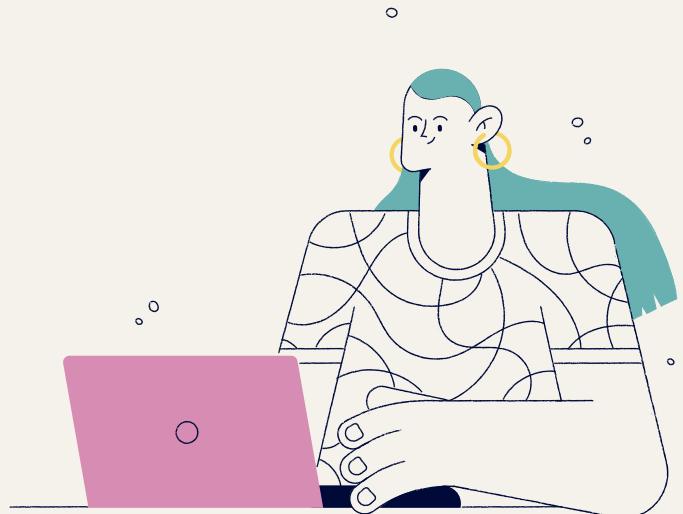
# Opening Remarks

# The Problem: Context Switching

Imagine writing a research paper with many tabs open, and wanting to chat with an LLM about it

- Articles
- Research papers
- Google docs essay

For every new tab you open, you want to make sure chatgpt has that context





# The Use Case

This would provide value in the general case where the user wants additional context LLMs don't have. The desire could come in a lot of ways.

- Recency: Information relevant to the discussion is past the LLMs training cutoff
- Personal writing: An LLM will likely not have access
- Commentary pieces: You may want to make an argument in the context of a particular document, or in response to a particular thing
- Niche content / technical documentation: Web crawling will likely be insufficient



02

## Overview & Live Demo

# Brief Overview

TabAssist reads and extracts the content from your open tabs, keeps track of it, and lets you ask questions or get summaries directly through a chat interface. Instead of juggling ten articles yourself, you can ask something like '*What are the key points across all my research tabs?*' and get a coherent answer. It's designed to streamline research and writing.

# Feature 1

## Anonymous Sign-In via Session ID

Instead of requiring sign-up, we use Convex's built-in anonymous sessions. When someone first opens the extension, Convex automatically creates a session for them. This session persists in the background and is stored in `localStorage`.

Users get a persistent, personalized experience with their tab groups and conversations saved, without ever creating an account.”

# Feature 2

## Tab Text Extraction

When the user selects a group of tabs or hits the extraction button, we scrape and clean the content from each tab.

# Feature 3

## Tab Group Organization

Users can create tab groups for different tasks. For example, one group for ‘Medical Research’ and another for ‘Practical Gen-AI Course’

Each tab group has its **own chat interface**, and the AI will only reference the tabs associated with that group. This scoping ensures clean and relevant conversations. You can also **add or remove tabs** from any group, and **remove groups**.

## Feature 4

# Group-Specific AI Messaging

Once tabs are crawled, the user can chat with our AI assistant. The model uses only the content from the current tab group to answer questions or summarize pages.

For example, I can ask a question that pulls info from multiple tabs, and the AI will respond with an answer that reflects what's been extracted.



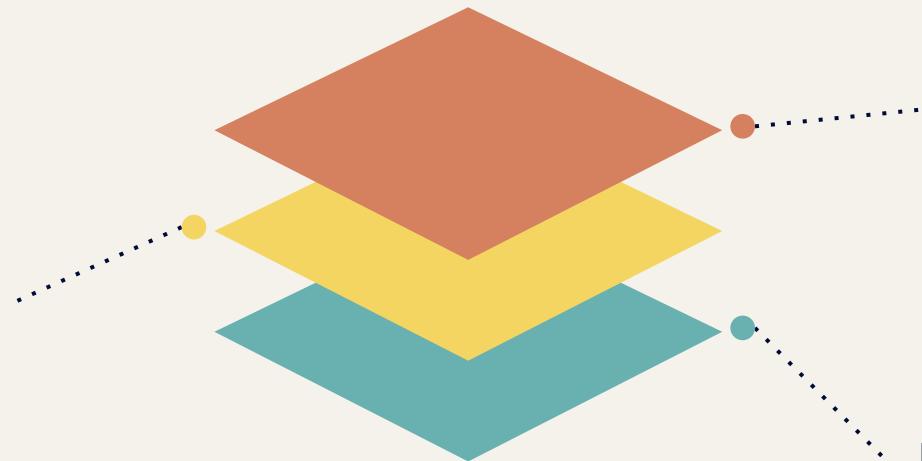
03

# Inside the Engine: TabAssist

# 3 Runtimes

## Content Scripts

Injected into web pages



## React App

Has its own isolated DOM and JS context

## Background Scripts

Runs persistently to handle long term tasks

# Bundling

**A bundle:** The compiled version of a js file. JS or TS files may import things, but these dependencies need to be bundled and compiled down to a single .js or .jsx file

**An entry point:** the .js file that gets injected into the page. You can have multiple entry points, or a single one that conditionally renders content depending on the context it's rendered in.

**Why avoid a single entry point?** This can avoid many dependency issues related to certain imports not working in certain contexts: some imports may require the [chrome api](#) and should only be used for background/content scripts — there may also be [browser-specific APIs](#) that cannot be run in the background context

# Text Extraction Overview

## Architecture:

- **React UI:** Triggers extraction
- **Background Script:** Manages messaging from React UI
- **Content Script:** Clones and processes DOM in page context

## Key Features:

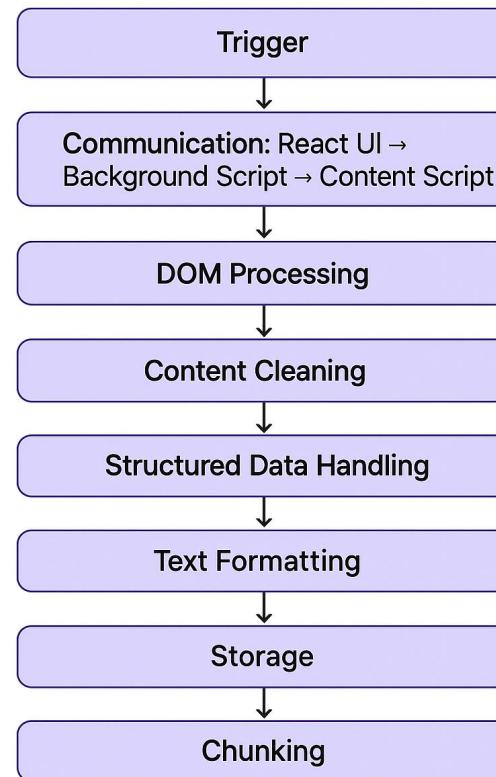
- **AI Integration:** Powers chat, semantic search, with Convex storage
- **Metadata:** Includes title, excerpt, length, site name, and content

## Tech Highlights:

- **Native DOM APIs** for fast processing
- **Optimized Performance** via DOM cloning

# Text Extraction Pipeline

## Extraction Process Flow





04

# Closing Remarks

# Current Limitations

## 1. Limited Content Extraction Capabilities

- a. It only works with HTML content and has limitations with dynamic websites, single-page applications, and content loaded via JavaScript after the initial page load

## 2. Limited Media Handling

- a. There is no support for handling for extracting or processing non-text content such as images, videos, or audio files

## 3. No Data Analytics

- a. Lacks insights or analytics about tab usage patterns, collection organization, or content themes

# Future Plans



## More Advanced AI Integration

- + RAG capabilities
- + Cross-tab knowledge
- + Summaries for quick overview



## Integration w/ External Service

- + Notion
- + Calendar
- + Browser History



## Improved User Experience

- + Error handling
- + Dashboard view with analytics
- + Offline sync



# Reflection and Takeaways

## Technical Insights

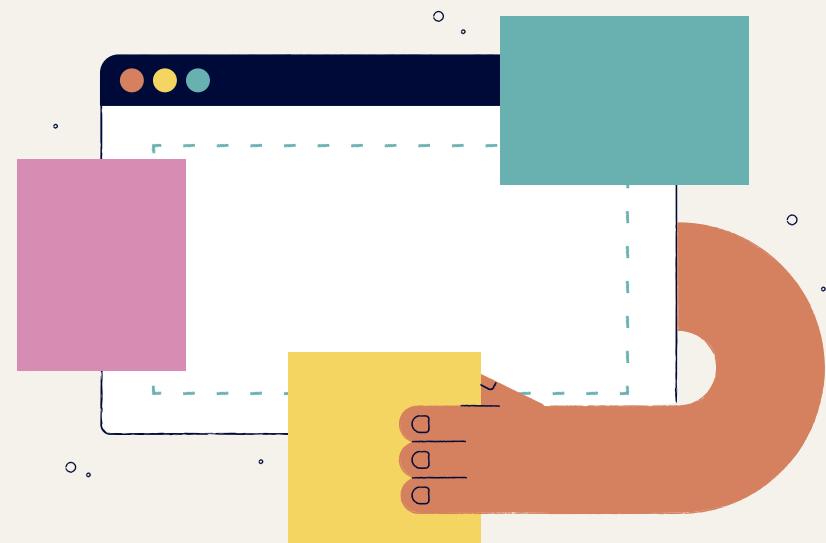
- Working with Chrome's extension architecture required thoughtful design decisions

## Text Extraction

- Beyond just text, the extraction process captures more valuable metadata

## Tradeoff

- Content Quality vs Processing Speed





# 05

## Q&A

Thank you for listening!





# Mission Statement

Lists help you make your point clearer because:

- They're simple
- Organize your ideas
- Be specific





## Our company

Mercury is the closest planet to the Sun and the smallest in the Solar System. It is only a bit larger than our Moon

# Market trends

## JUPITER

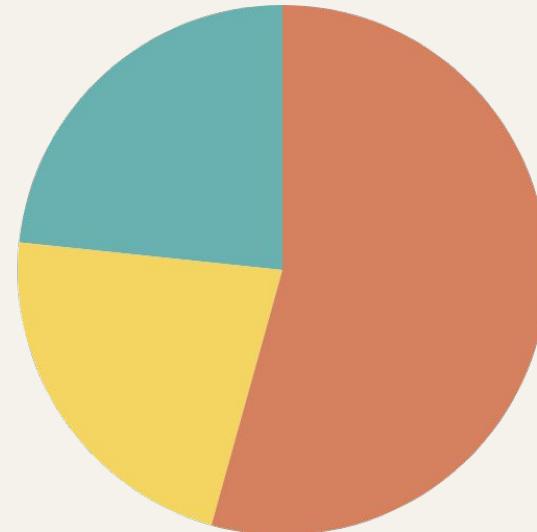
Jupiter is the biggest one

## VENUS

Venus has a nice name

23%

22%



55%

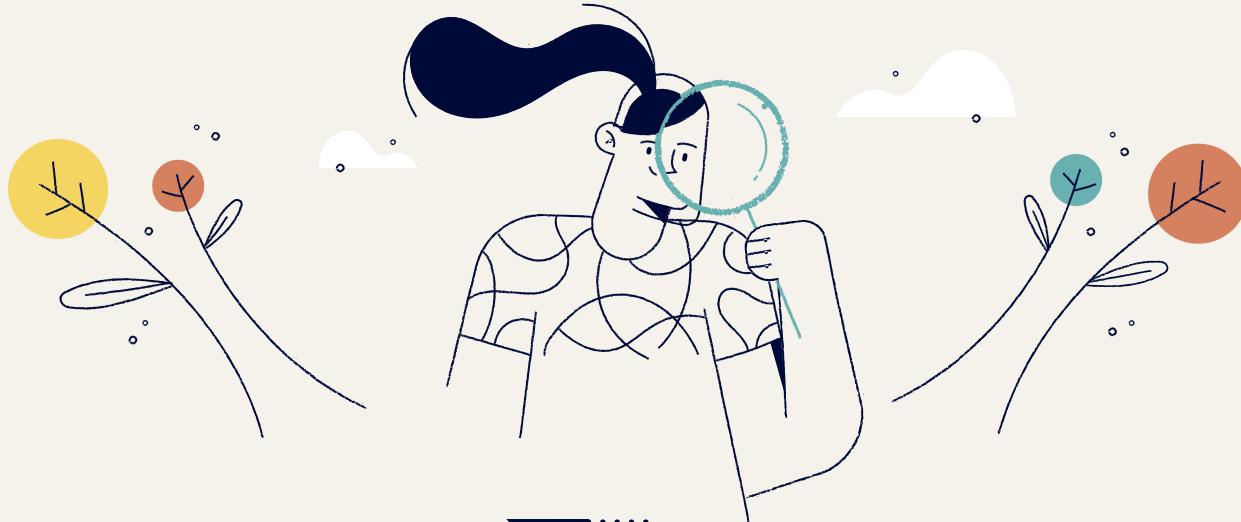
## MARS

It's a very cold place, not hot

If you want to modify this graph, click on it, follow the link, change the data and paste the new graph here

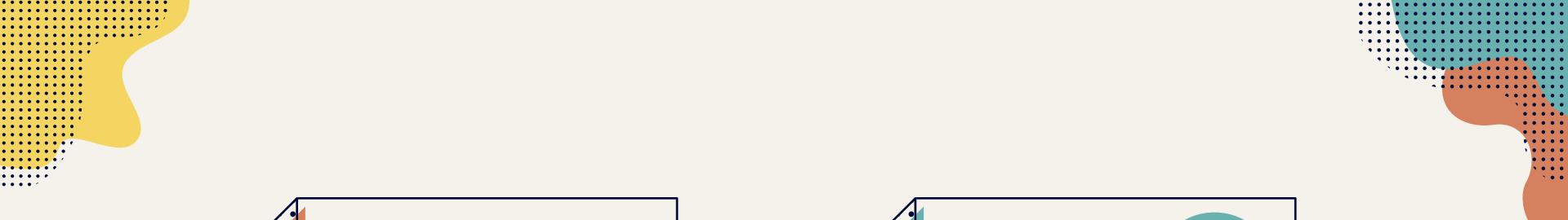
## PROBLEM

Mars is cold. Its atmosphere is full of iron oxide dust



## SOLUTION

Saturn is ringed and composed of helium and hydrogen



## US

Mars is cold. Its atmosphere is full of iron oxide dust

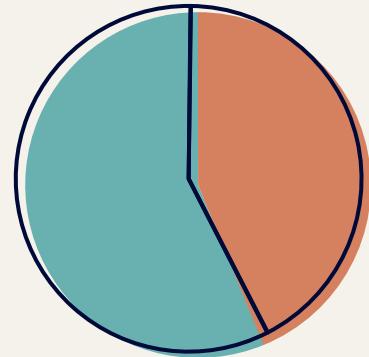
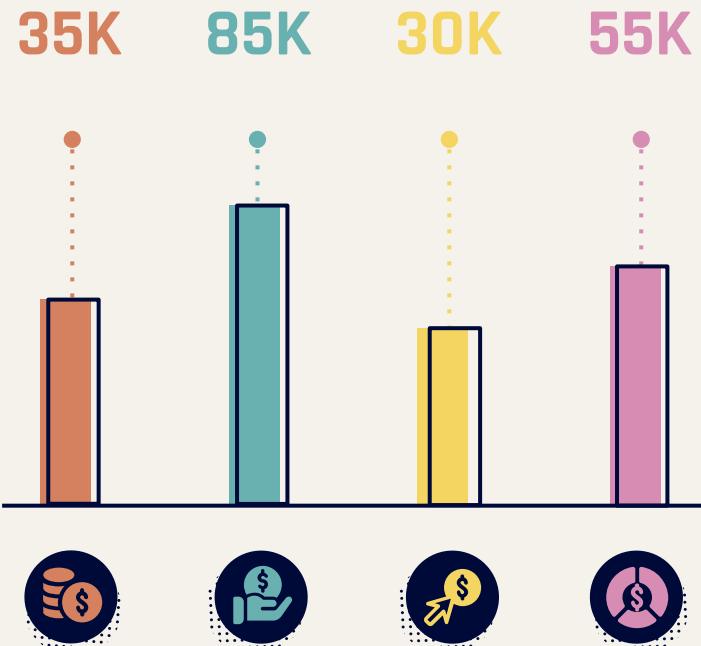


## THEM

Saturn is composed mostly of hydrogen and helium



# Target



60%

Mars is actually a  
very cold place



40%

Venus is hot but  
has a nice name

# Market size

45%

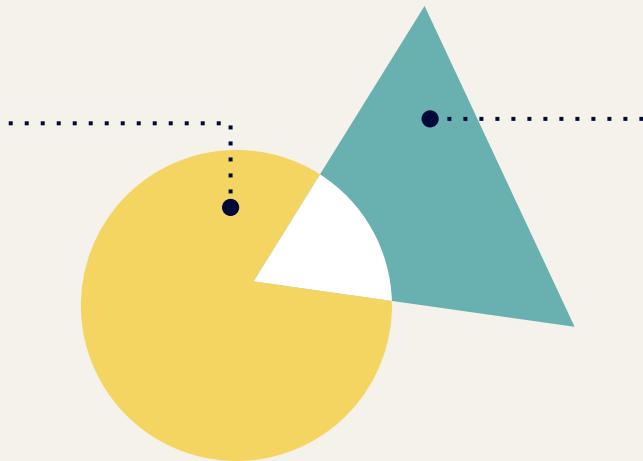
MARS

Mars is cold. Its atmosphere is full of iron oxide dust

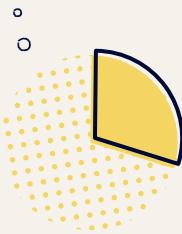
75%

MERCURY

Mercury is the smallest planet in the Solar System



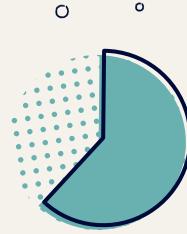
# Market share



**45%**

**VENUS**

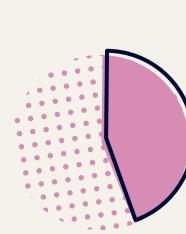
Venus has a  
beautiful name



**60%**

**MARS**

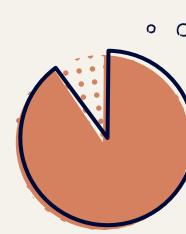
Mars is a cold  
place, not hot



**45%**

**MERCURY**

Mercury is the  
smallest planet



**95%**

**SATURN**

Saturn is the  
ringed planet

# Competition analysis

## Saturn

Saturn is the ringed planet

## Mercury

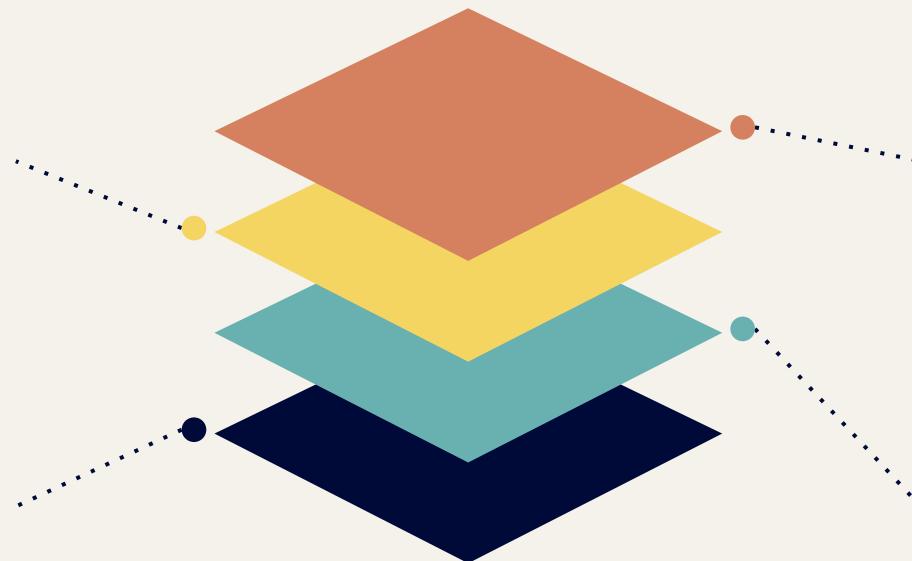
Mercury is the smallest planet

## Mars

Mars is a very cold place

## Venus

Venus has a beautiful name



# Our services



## MERCURY

Mercury is the smallest planet



## SATURN

Saturn is the ringed one and a gas giant



## MARS

Mars is a very cold place, not hot



## NEPTUNE

Neptune is the farthest planet



## URANUS

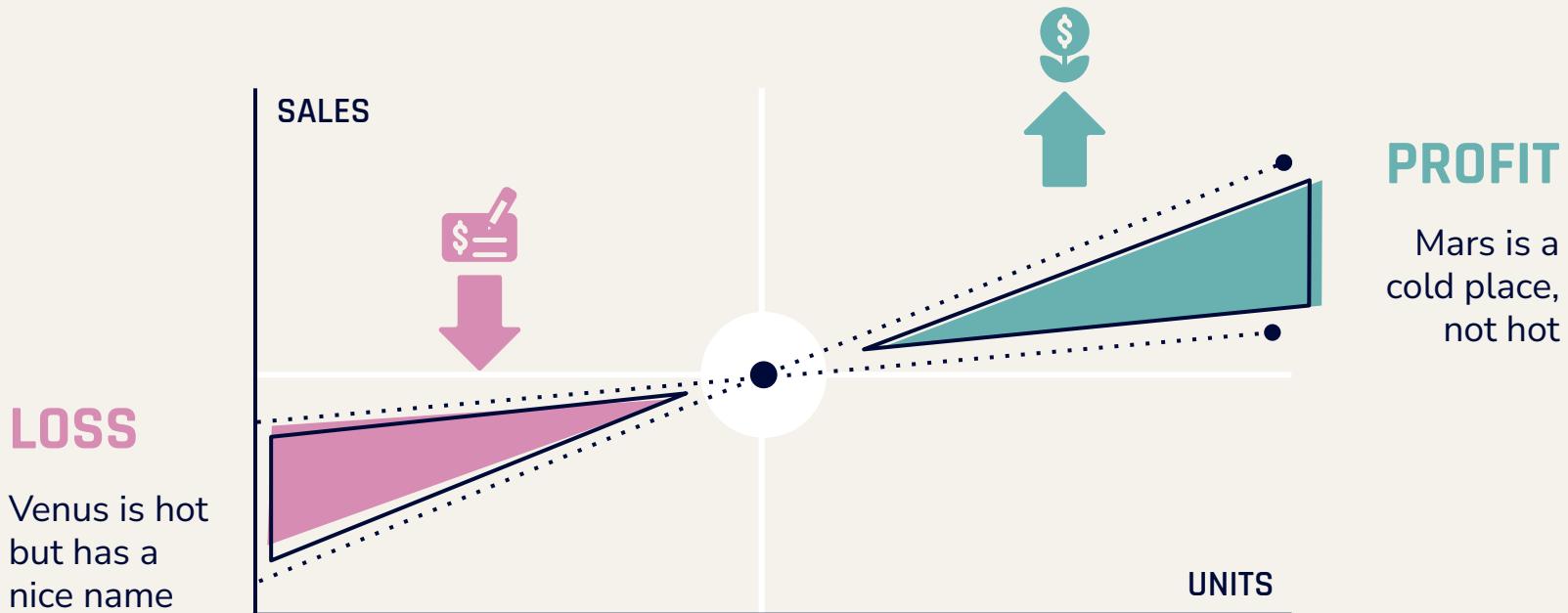
Uranus is the coldest planet



## JUPITER

Jupiter is the biggest planet

# Break-even analysis





## A picture always reinforces the concept

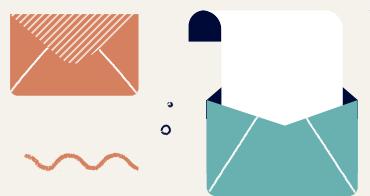
Images reveal large amounts of data, so remember: use an image instead of long texts

# Our plans



## PLAN A

Mars is a cold place.  
Its atmosphere is  
full of iron oxide  
dust



## PLAN B

Mercury is the  
smallest planet in  
the Solar System

# Sales and distribution

## Channel 1

Saturn is the ringed planet



## Channel 2

Mars is a very cold place



## Channel 3

Uranus is the coldest planet



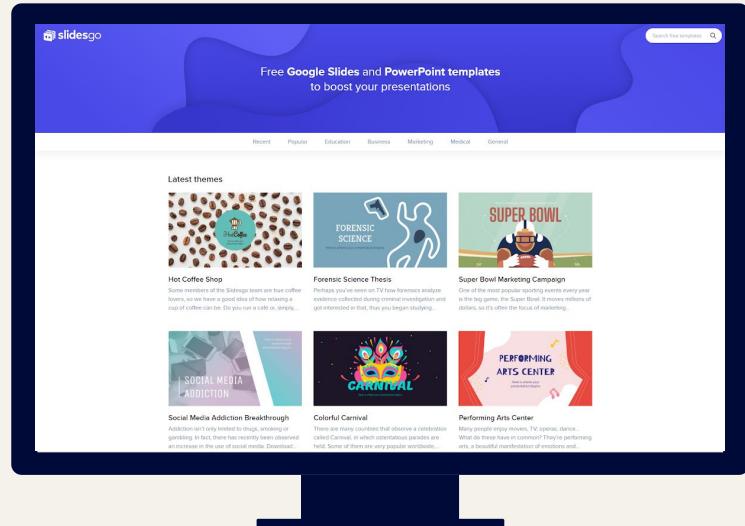
## Channel 4

Jupiter is the biggest planet



# Advertising and promotion

If you want to replace the image on the screen with your own work, right-click on it, choose “Replace image” and add yours





04

# Closing Remarks

# Future Plans



## More Advanced AI Integration

- + RAG capabilities
- + Cross-tab knowledge
- + Summaries for quick overview



## Integration w/ External Service

- + Notion
- + Calendar
- + Browser History



## Improved User Experience

- + Error handling
- + Dashboard view with analytics
- + Offline sync



# Reflection and Takeaways

## Technical Insights

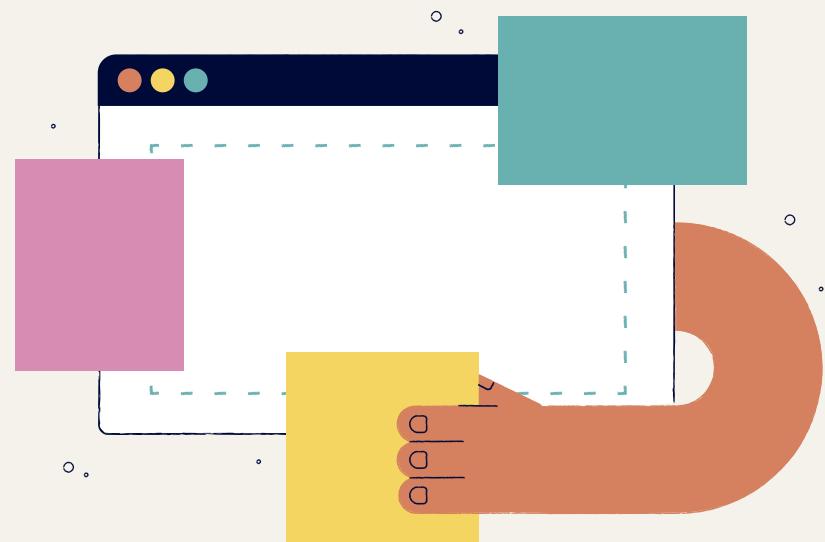
- Working with Chrome's extension architecture required thoughtful design decisions

## Text Extraction

- Beyond just text, the extraction process captures more valuable metadata

## Tradeoff

- Content Quality vs Processing Speed





# 05

## Q&A

Thank you for listening!

# Thanks!

Do you have any questions?

info@slidesgo.com  
+91 620 421 838  
yourcompany.com



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# Our team



**ALFIE EVANS**

Mars is a cold  
place, not hot



**FRANK BROWN**

Saturn is the  
ringed planet



**ADA WRIGHT**

Venus has a  
beautiful name

# Our partners

01

**VENUS**

It's hot

02

**MARS**

It's cold

03

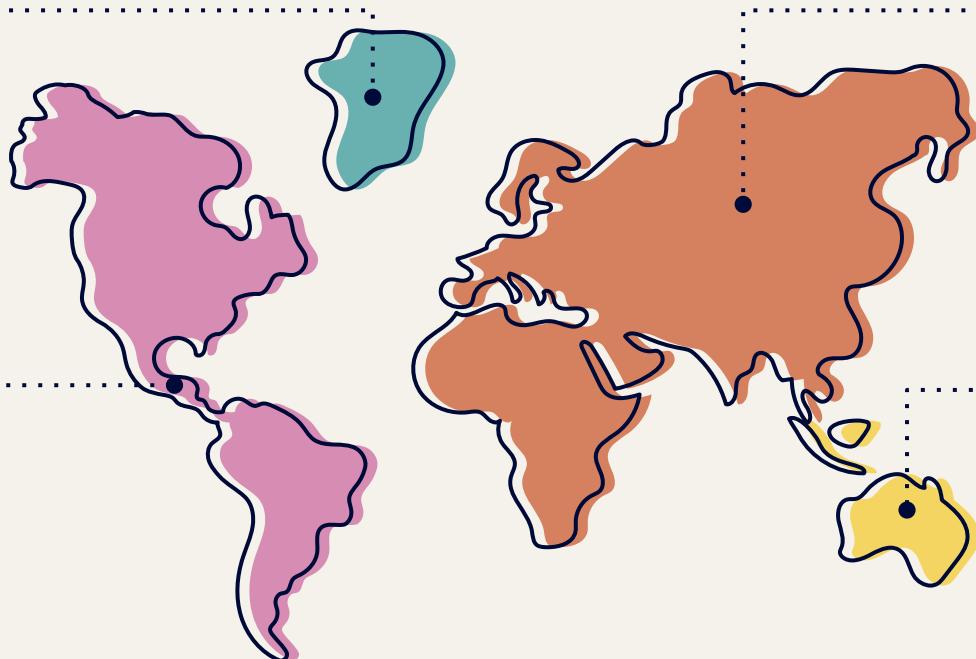
**MERCURY**

It's small

04

**JUPITER**

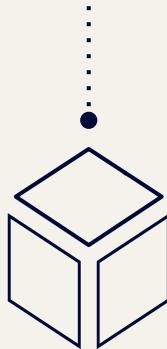
It's big



# Our process

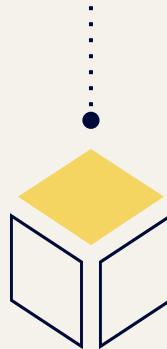
## Day 1

Saturn is the  
ringed planet



## Day 2

Neptune is the  
farthest planet



## Day 3

Jupiter is the  
biggest planet



## Day 4

Mars is a cold  
place, not hot

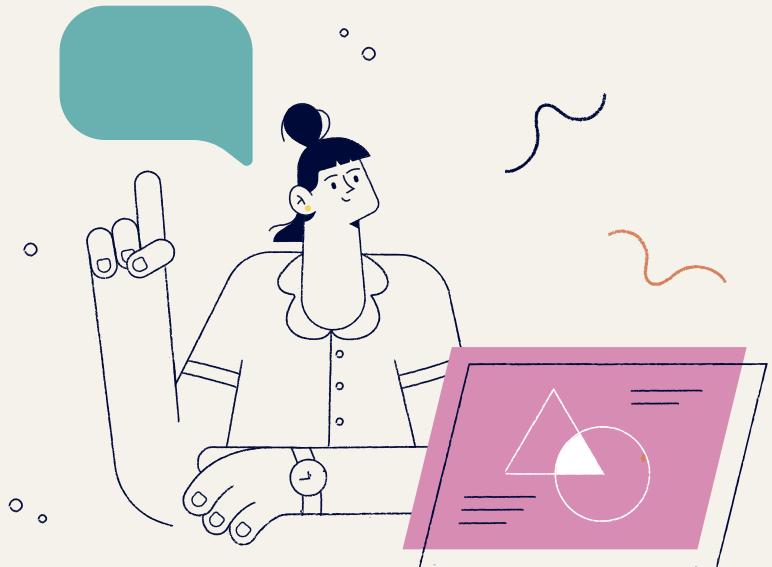


**A picture is worth  
a thousand  
words**



# AWESOME WORDS

Because key words are great for catching your audience's attention





06

# Financial plan

You could enter a subtitle  
here if you need it

# Predicted growth



**Mass**  
(earths)



**Diameter**  
(earths)



**Surface  
gravity**  
(earths)

	Mass (earths)	Diameter (earths)	Surface gravity (earths)
<b>Mercury</b>	0,06	0,38	0,38
<b>Mars</b>	0,11	0,53	0,38
<b>Saturn</b>	1,16	9,4	1,16

# Balance sheet

**1M**

## ASSETS

What the company owns at the moment

**3K**

## LIABILITIES

What the company owes at the moment

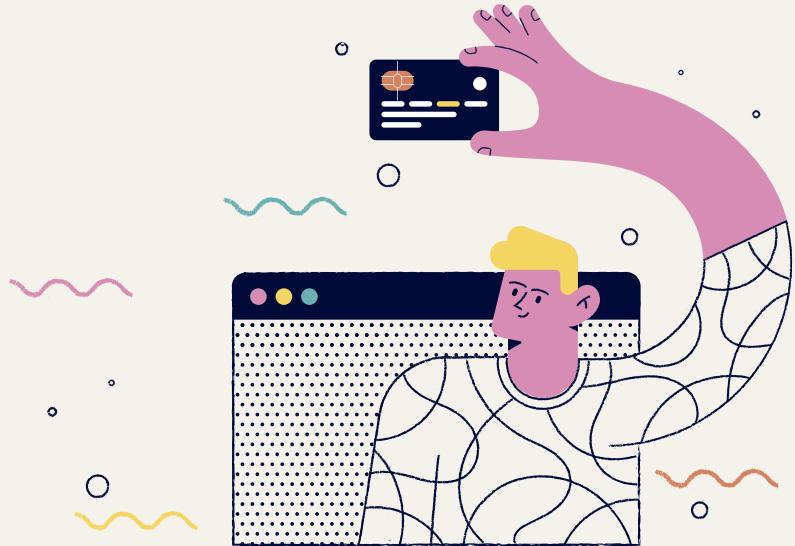
**7K**

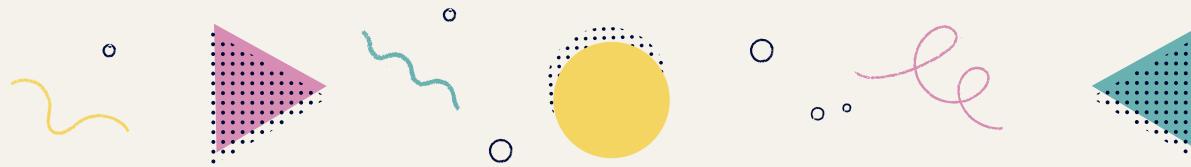
## EQUITY

The difference between assets and liabilities

# 4,333,000,000

Big numbers catch your audience's attention

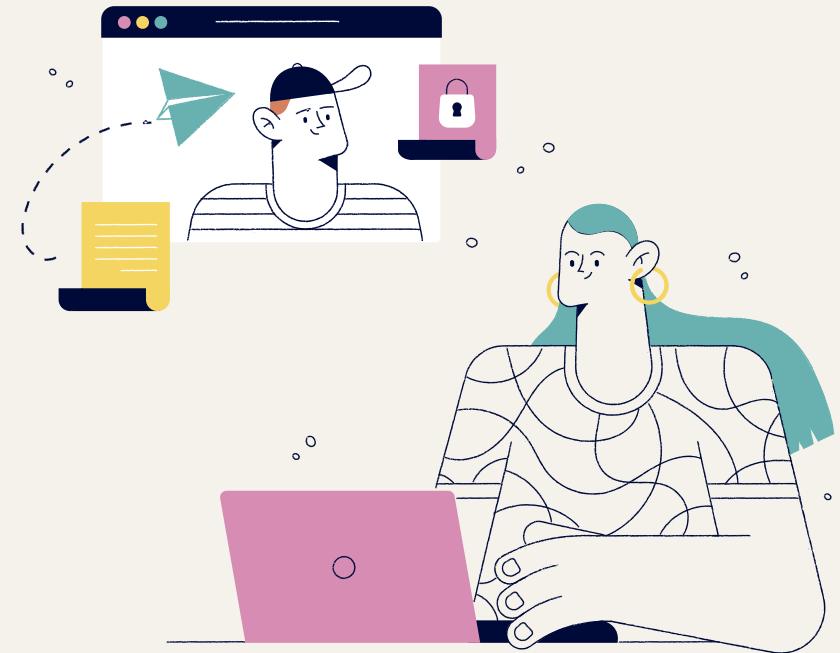
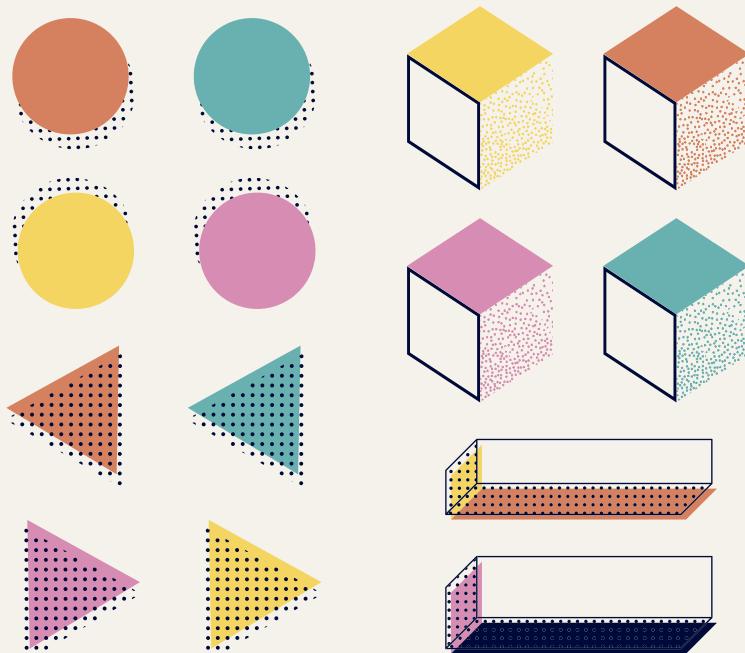




«This is a quote. Words full of wisdom that someone important said and can make the reader get inspired»

—**SOMEONE FAMOUS**

# Alternative resources



# Alternative resources

## PHOTOS

- Colorful set of cubes lined up on floor
- Colourful cubes creating an arrow pointing forward
- Front view of colored cubes on floor

# Resources

## VECTORS

- Sale banner collection in Memphis style
- Design process concept for landing page
- New message concept for landing page
- Image upload concept for landing page
- Credit card payment concept for landing page
- House searching concept for landing page
- Brainstorming concept for landing page
- Co-workers concept for landing page

## PHOTOS

- Arrow and steps on cubes
- Increasing colourful cubes and pointy arrow