Google Cloud

Bringing the Google Cloud Platform to UC Berkeley Students

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Survey

We surveyed people within our personal networks here at UC Berkeley to better understand how we can make GCP more accessible to more students.

Survey Methodology

Overview of the "tech experience" survey we distributed

Tech Experience Survey

Background
Major/minor(s), participation in extracurriculars and research, comfort with coding

Best Learning Strategy
How do you best learn a new skill?

Technical Problems
What technological problems have you encountered?

Interest in Tools
What tools would you be interested in learning for classes, extracurriculars, or research?

Responses

College Students

Berkeley organizations
Personal connections

59 responses

Analysis

How well do our personas match the sampled population?

Note: Some students are part of multiple categories.

51% humanities student

53% technical student

29% researcher

19% entrepreneur

User Personas

Using our survey, we found that most respondents fell into four major categories: humanities student, researcher, entrepreneur, and technical student

Persona 1: Humanities Student

Humanities students will need easy to use products for data analysis and websites

COMPUTER COMPETENCE

1.3 / 5.0

PROBLEMS FACED

50% had trouble with using AI/ML

38% had trouble with creating websites/apps and storage

FEATURES OF INTEREST

Data Analysis, Machine Learning, Image Analysis

PREFERRED LEARNING METHODS

Academic Classes, Peers

Persona 2: Researcher

Researchers have different backgrounds and will need a wide variety of products for heavy data analysis

COMPUTER COMPETENCE

2.3 / 5.0

PROBLEMS FACED

53% had trouble with data entry
47% had trouble with computing power
35% had trouble utilizing AI/ML to enhance their research

FEATURES OF INTEREST

Data Analysis, Machine Learning, Image Analysis

PREFERRED LEARNING METHODS

Academic Classes, Videos, Online Courses

Persona 3: Entrepreneur

Entrepreneurs will need GCP products to help them create their own products and share info

COMPUTER COMPETENCE

3.4 / 5.0

PROBLEMS FACED

63% had trouble creating apps for their startup

54% had trouble integrating AI/ML to enhance their startup

FEATURES OF INTEREST

Data Analysis, Image Analysis, Machine Learning

PREFERRED LEARNING METHODS

Academic Classes, Videos, Online Courses

Persona 4: Technical Student

Tech students will need products for machine learning, artificial intelligence and complex data analysis

COMPUTER COMPETENCE

4.1 / 5.0

PROBLEMS FACED

67% had trouble applying ML/AI
51% had trouble with data entry
41% had trouble coding and/or deploying their app idea

FEATURES OF INTEREST

Machine Learning, Data Analysis, Image Analysis

PREFERRED LEARNING METHODS

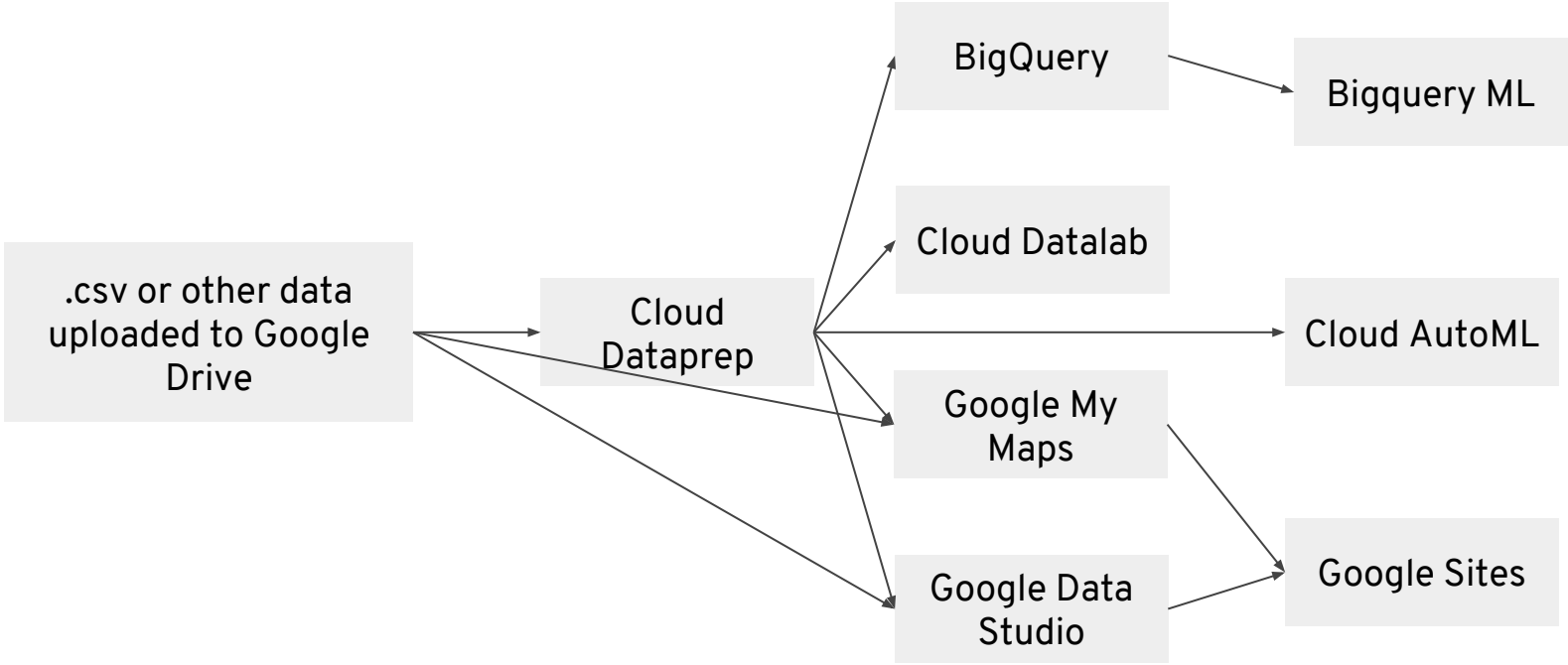
Academic Classes, Videos

Recognize

We can utilize the popularity of Google Drive to increase recognition of the Google Cloud Platform and introduce curiosity into what the platform does.

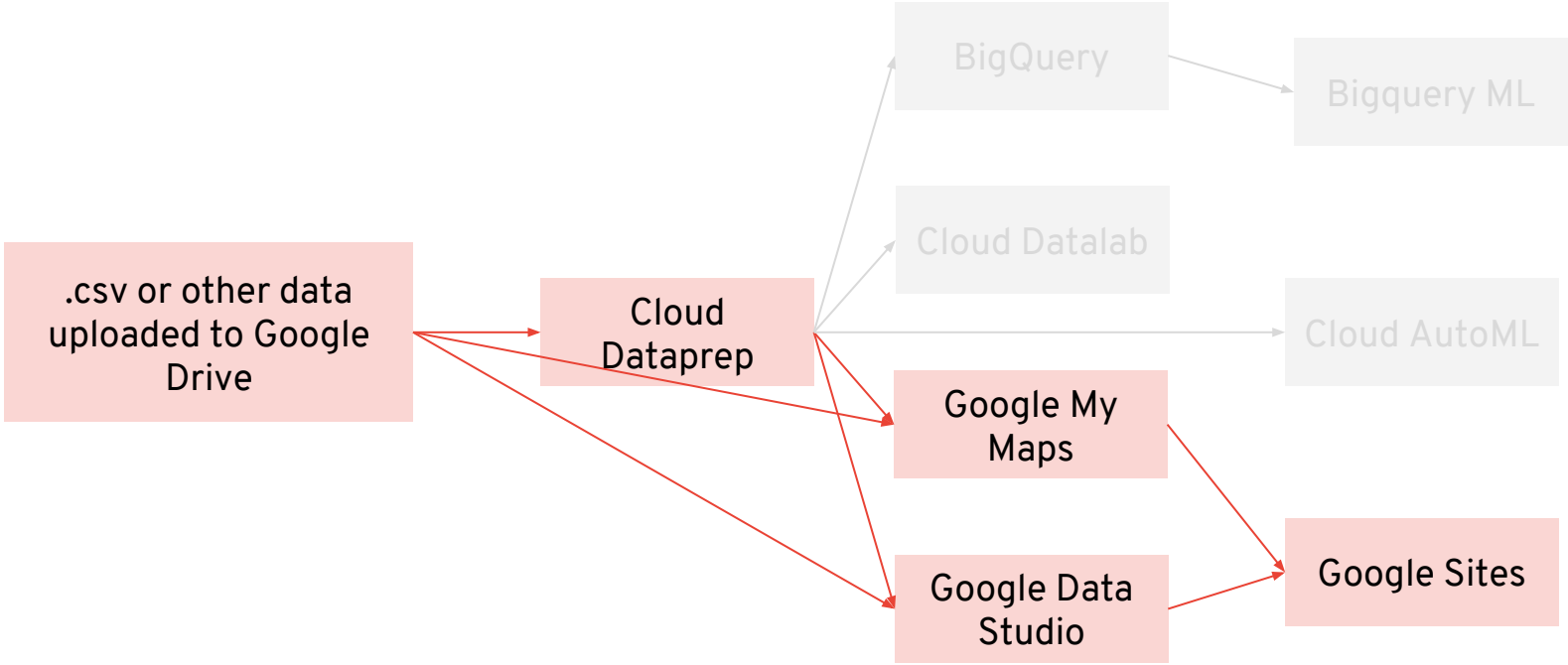
Using Google Drive Pathways

Google can leverage the popularity and familiarity of Google Drive to create paths to other GCP products



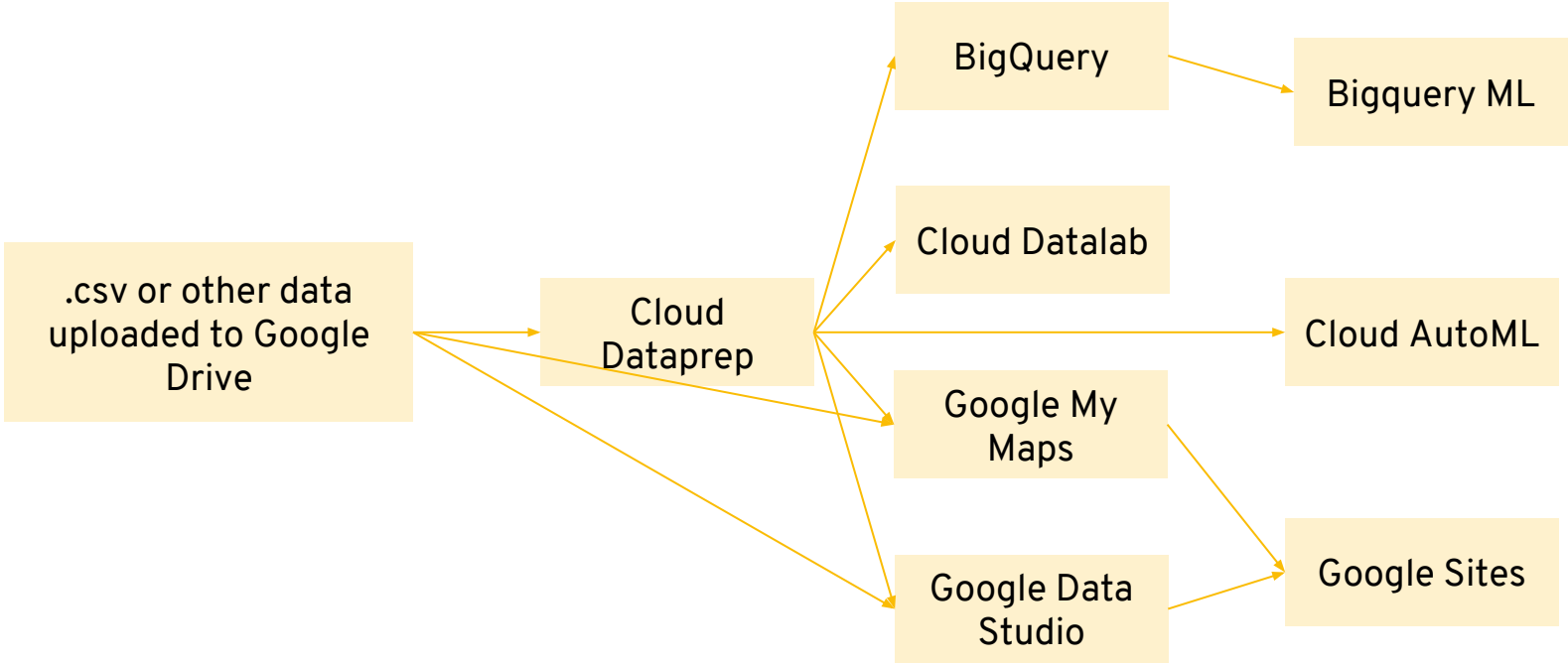
Humanities Student

Humanities students will use products that don't need code and could benefit from Google Sites integration



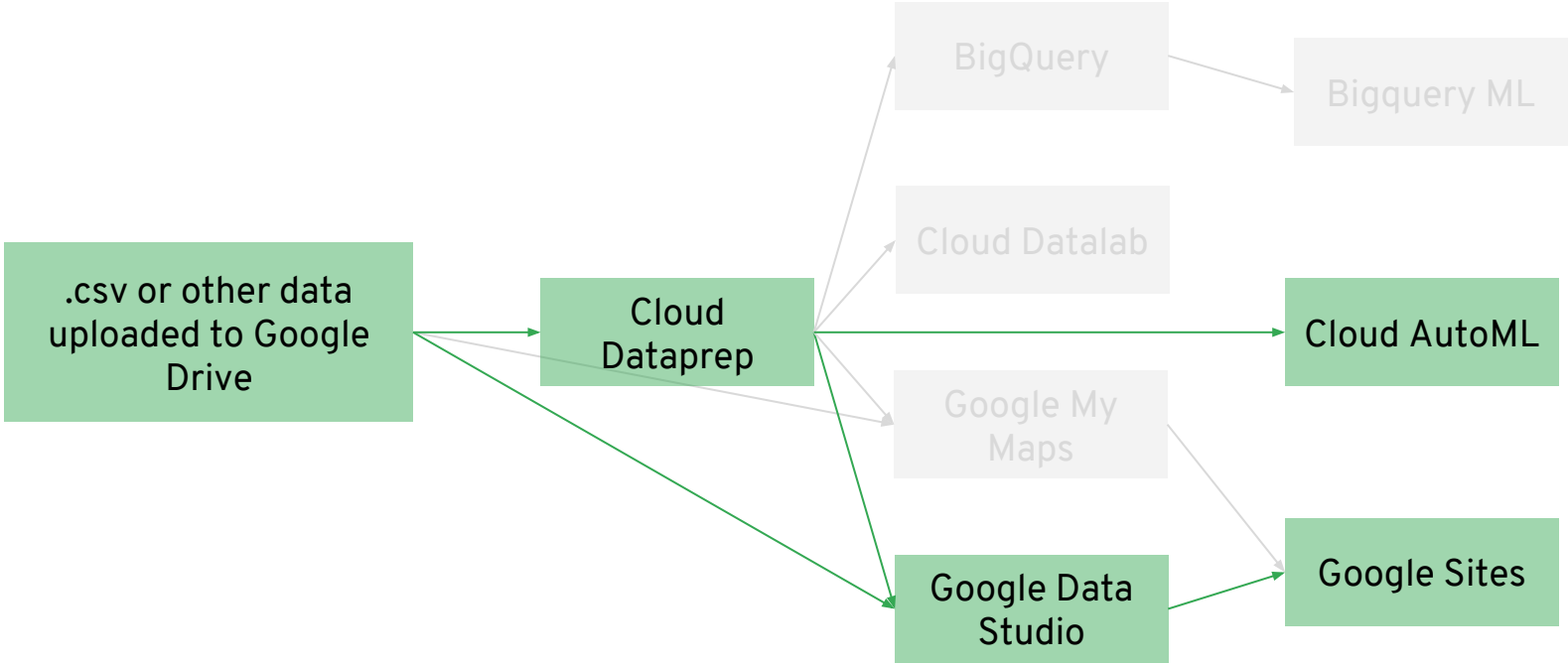
Researcher

Researchers have a range of needs/experience and could either follow a more tech or humanities path



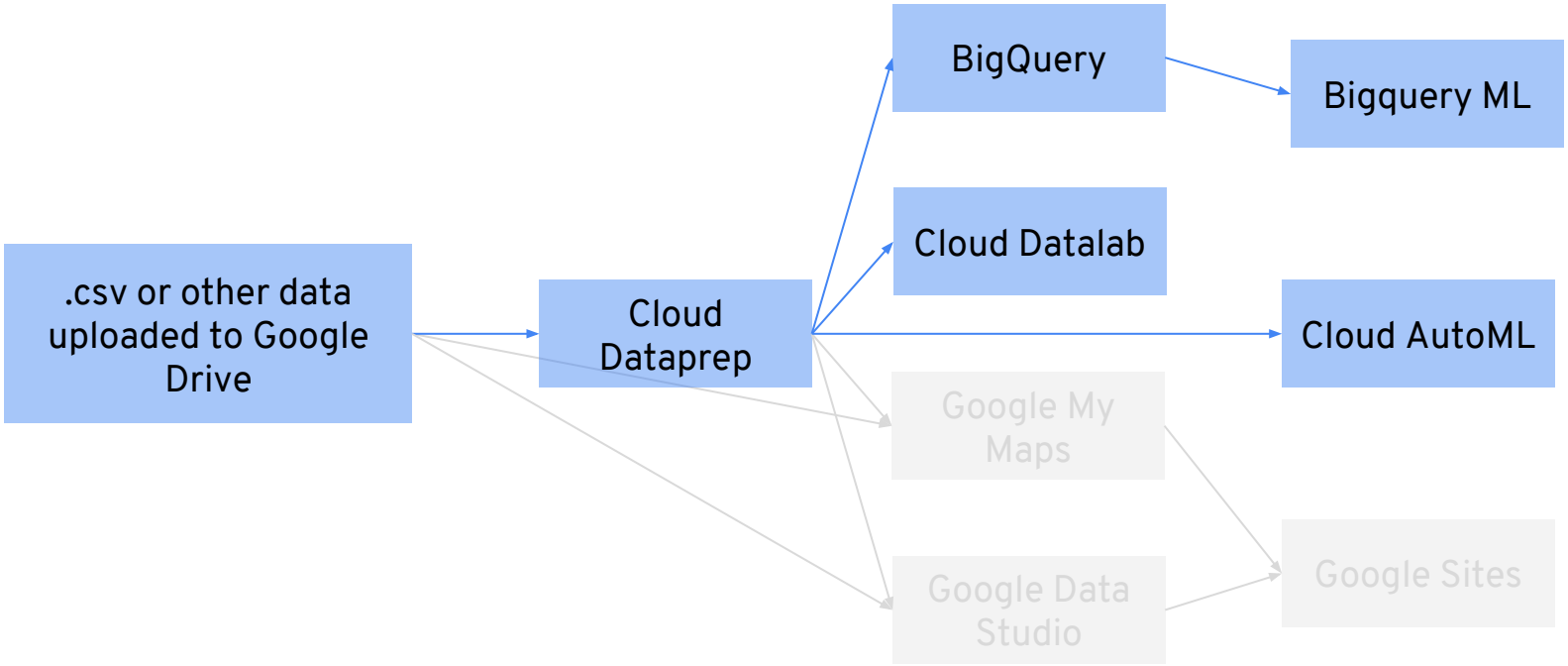
Entrepreneur

Many entrepreneurs need to present data about their business, some may use ML to create products



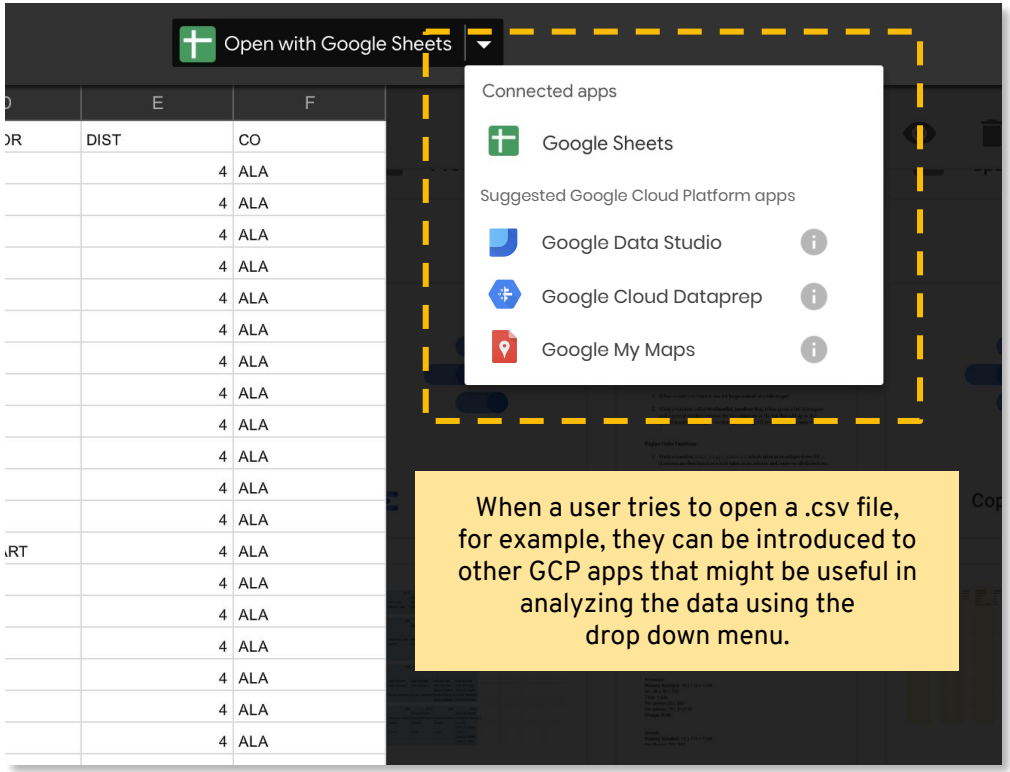
Technical Student

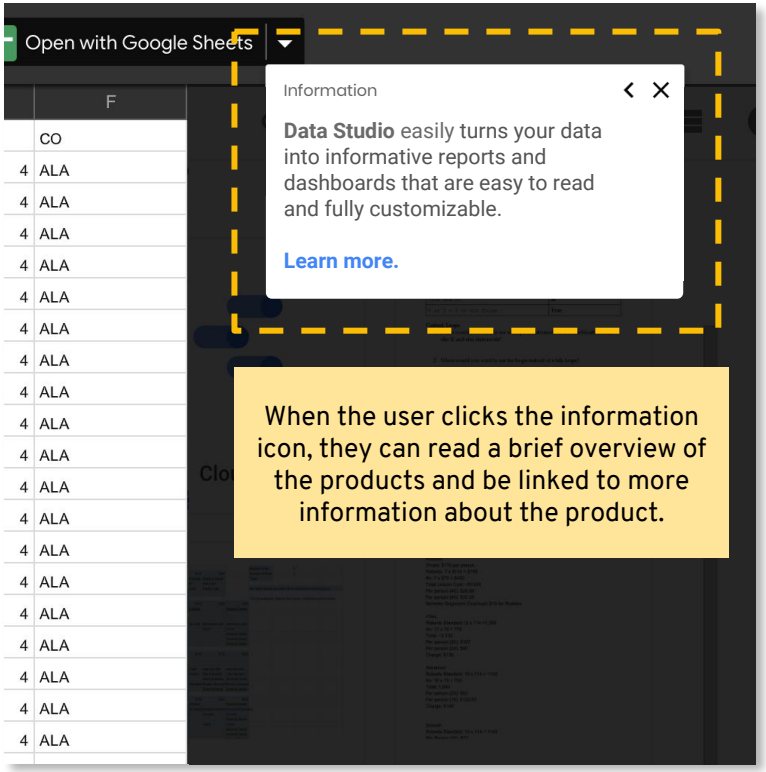
Tech students are highly interested in machine learning and paths to advanced data analysis



Data Studio

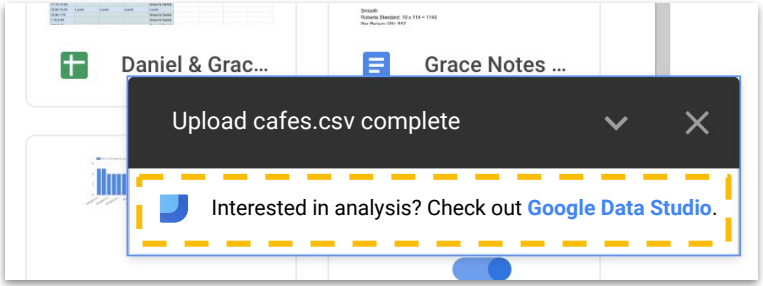
Google can leverage existing Drive UI to introduce students to GCP products

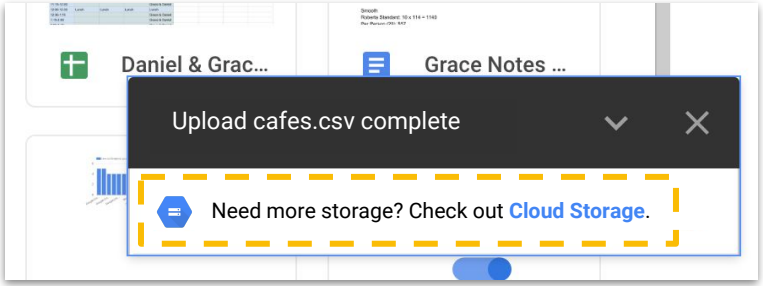




Google Drive Links

Google should facilitate custom linking between products to increase access to GCP





After a user uploads a file, customized pop-ups appear based on both the type of file and the size of the file. Such pop-ups link users to Google Data Studio, a platform for data analysis and visualization, and Cloud Storage, a storage solution for large files.

Google Data Studio Links

Google should facilitate seamless integration with all GCP products to keep users engaged

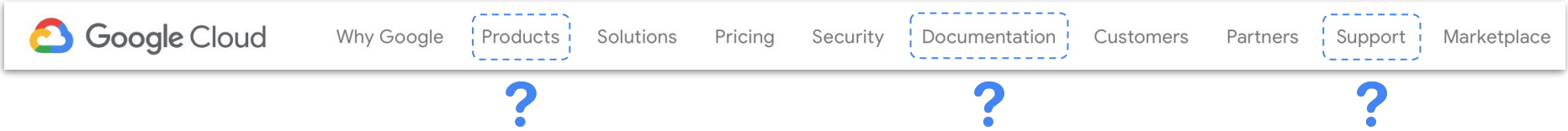
Another useful link connects Google Data Studio to Google Sites, allowing users to easily publish the reports they made on Google Data Studio online.

Understand

We can increase understanding of the Google Cloud Platform by employing terminology that is both user-friendly and encompassing.

Google Cloud Website

Google's menu caters toward experienced users, who have been exposed to technical menu options



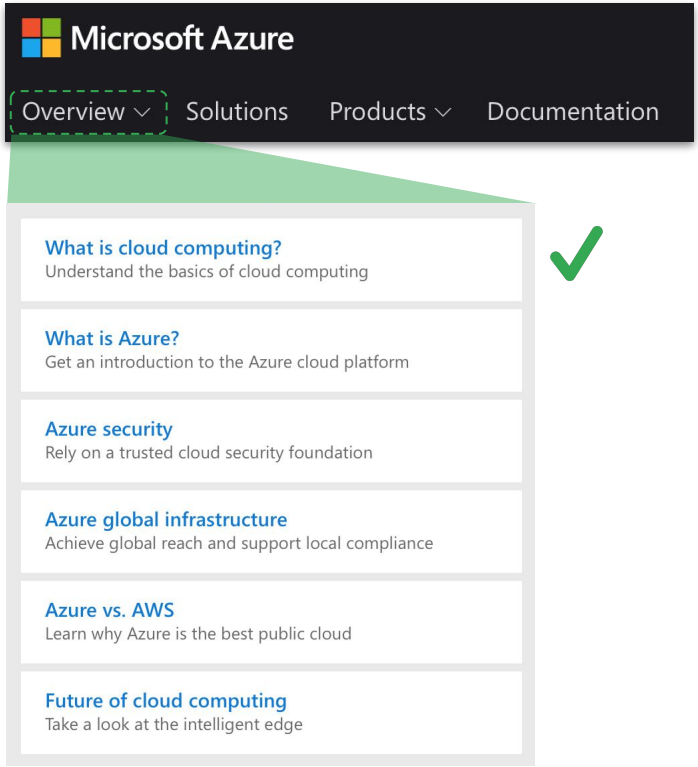
When we did user testing of Google Cloud's websites with our friends:

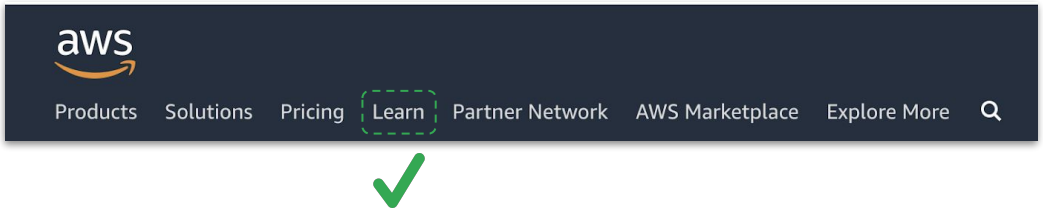
STEM researchers took:	Technical students took:	Humanities students took:
~15 seconds	~2 seconds	>1 minute

on average to reach the "a getting started guide" or other tutorials

Competitors' Approaches

Google can follow Microsoft's and Amazon's lead in using easily understood language





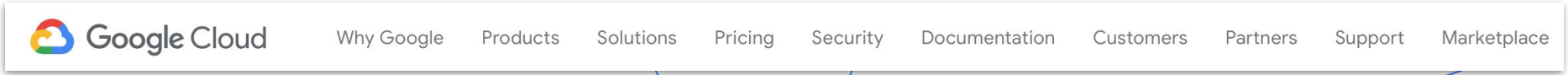
Microsoft Azure uses "Overview" to provide an easy way to understand both the concept of cloud computing and what Azure has to offer.

In a similar manner, Amazon makes it clear for users how to quickly get started working and integrating Amazon Web Services through the "Learn" menu option.

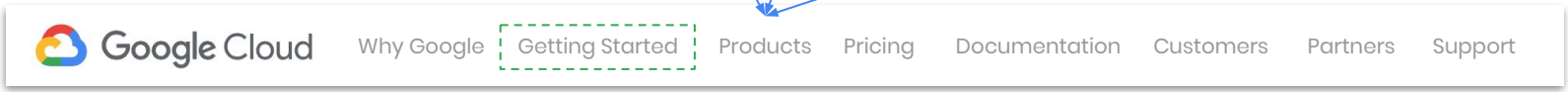
All users we tested on these websites found "a getting started guide" or other tutorials in under 10 seconds.

Changing Google Cloud Menu

Using terms that are more user-friendly in the menu will allow for easier exploration



We can combine menu items that are closely associated to make it easier for users to navigate the website.



✓ We can add a getting started tab to be more approachable to less experienced users, while keeping the documentation tab to make sure we do not confuse existing, experienced users.

Master

By integrating GCP into classes as well as workshops, students can master their knowledge of the platform and figure out how to best use it.

Instruction

Integrating with different classes is a powerful way for Google to reach a variety of students

75% of survey respondents mentioned that **academic coursework, online courses and DeCals** are the best way to learn a software program/skill.

Researchers

- Many UC Berkeley-affiliated organizations offer free workshops to researchers to learn new software.
- Google can host a workshop to introduce GCP to researchers.

D-Lab
dlab.berkeley.edu

Humanities

- Humanities students mention DeCals as a great way to pick up skills and learn programs.
- Google can hire a student ambassador to teach a GCP DeCal.

DECAL

Technical

- Tech and CS students tend to stick with the first programs to which they are exposed.
- Introducing GCP in freshman classes converts them to long term users.

DATA 8

Berkeley EECS
ELECTRICAL ENGINEERING & COMPUTER SCIENCES

Google Sponsored Events

Organizing GCP events in workshop and accelerators is a great way to create awareness on GCP

69% of survey respondents mentioned that they would be interested in **career opportunities and networking with Google.**

Entrepreneurs

Student entrepreneurs value networking with professionals as well as seek skill related guidance for their startups through entrepreneurship classes and accelerator events.

Google should host networking events or workshops for student entrepreneurs.

THE HOUSE FUND

Berkeley SKYDECK

FREE VENTURES

Students (STEM and humanities)

STEM and humanities students are interested in full time and internship positions in Google. Hence, info-sessions hosted by Google draw huge crowds.

Google can leverage this by hosting a GCP workshop where students can be introduced to the product as well as drop resumes.