



Google Cloud

Bringing the Google Cloud Platform to UC Berkeley Students

Kaataum Uthaya Suriyan
3rd Year
Economics

Sarah Tang
3rd Year
Conservation and Resource Studies &
Computer Science

Grace Pratt
3rd Year
Conservation and Resource Studies

Manu Prakasam
3rd Year
Electrical Engineering and Computer Science

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



Berkeley
Haas



Berkeley
UNIVERSITY OF CALIFORNIA
College of Natural Resources

Berkeley
UNIVERSITY OF CALIFORNIA
School of Public Health

UNIVERSITY OF CALIFORNIA
Berkeley
Letters & Science

Analysis

How well do our personas match the sampled population?

Note: Some students are part of multiple categories.

51% humanities

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

Coursework & Videos

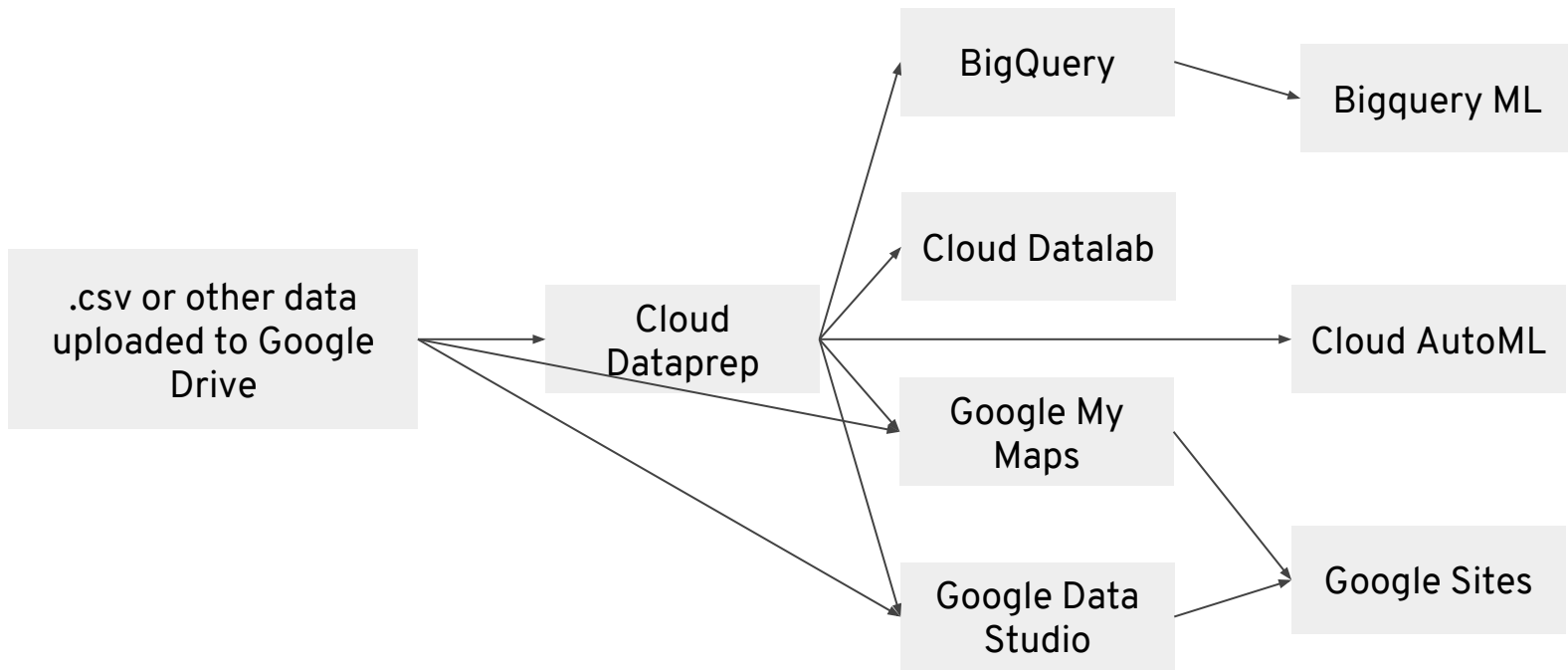
Recognize

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



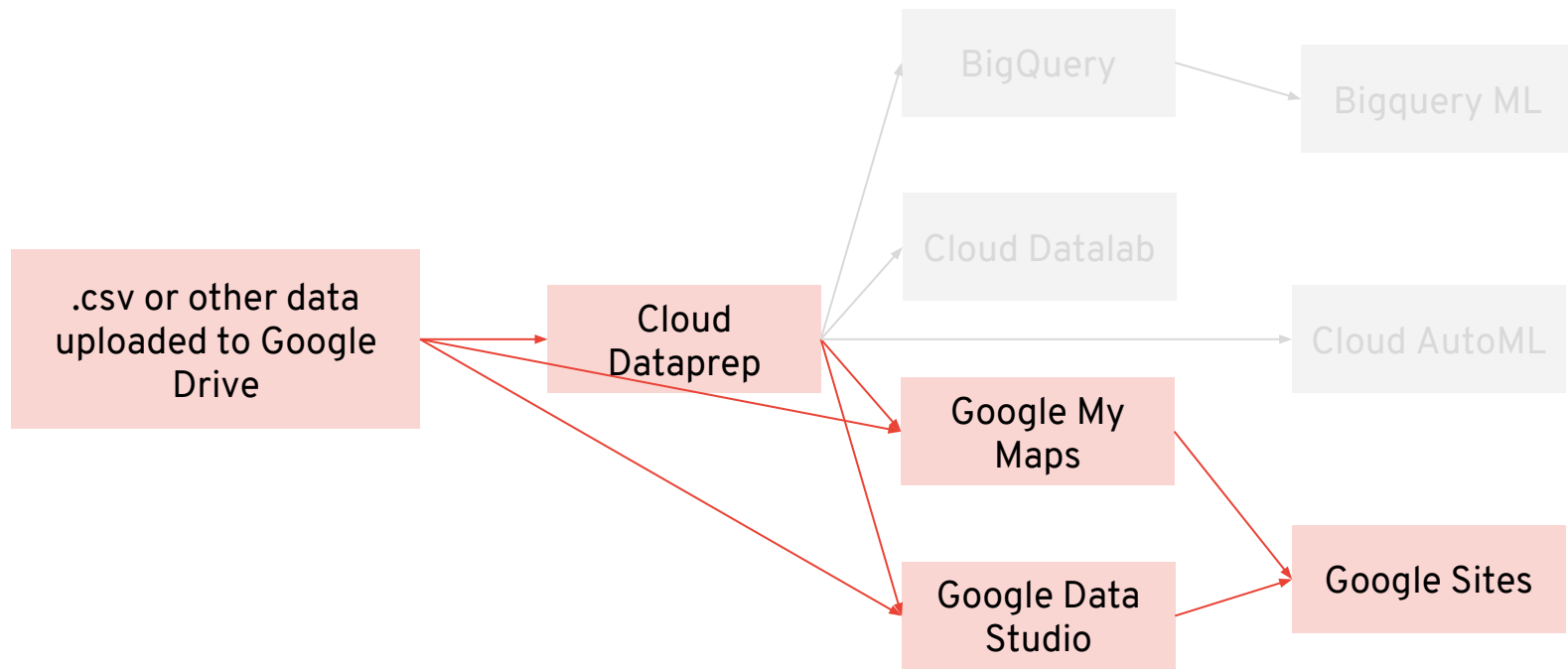
Google can leverage the popularity and familiarity of Google Drive to create paths to other GCP products



Humanities Student



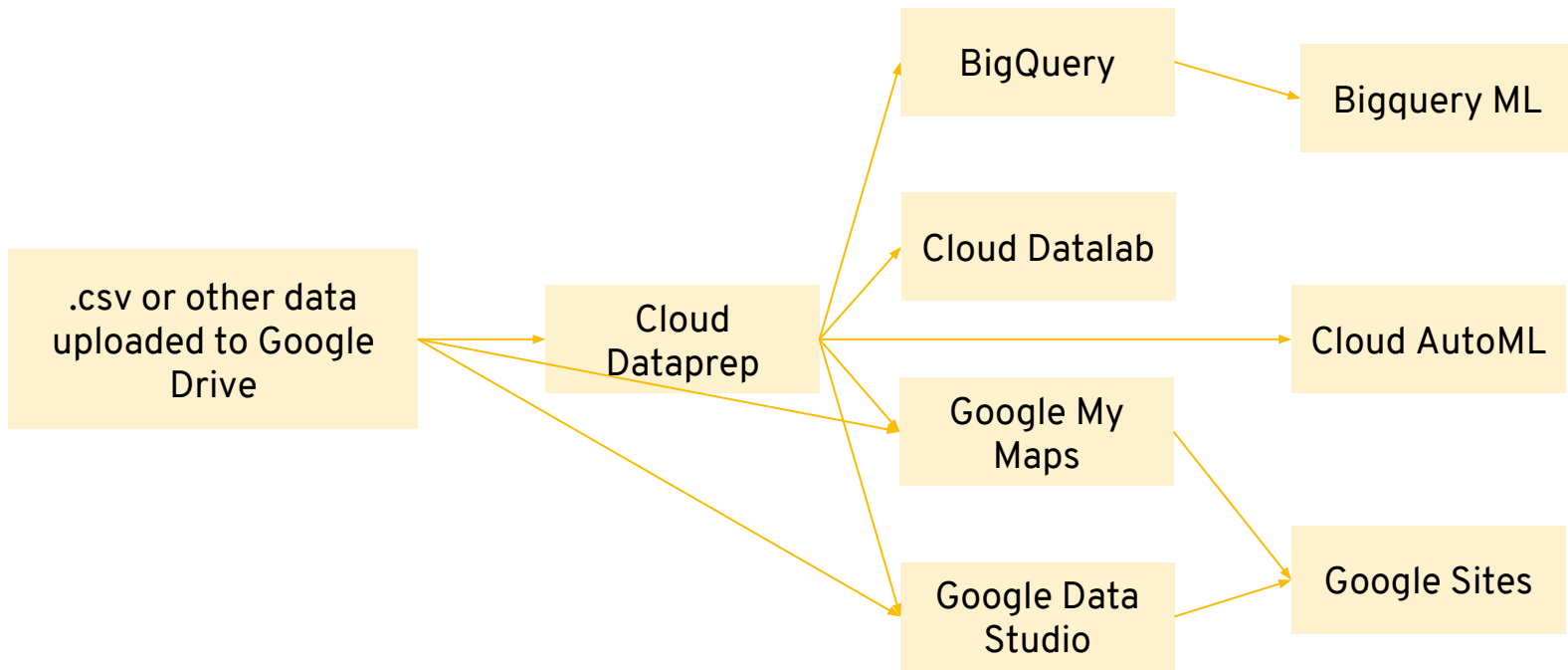
Humanities students will use products that don't need code and could benefit from Google Sites integration



Researcher



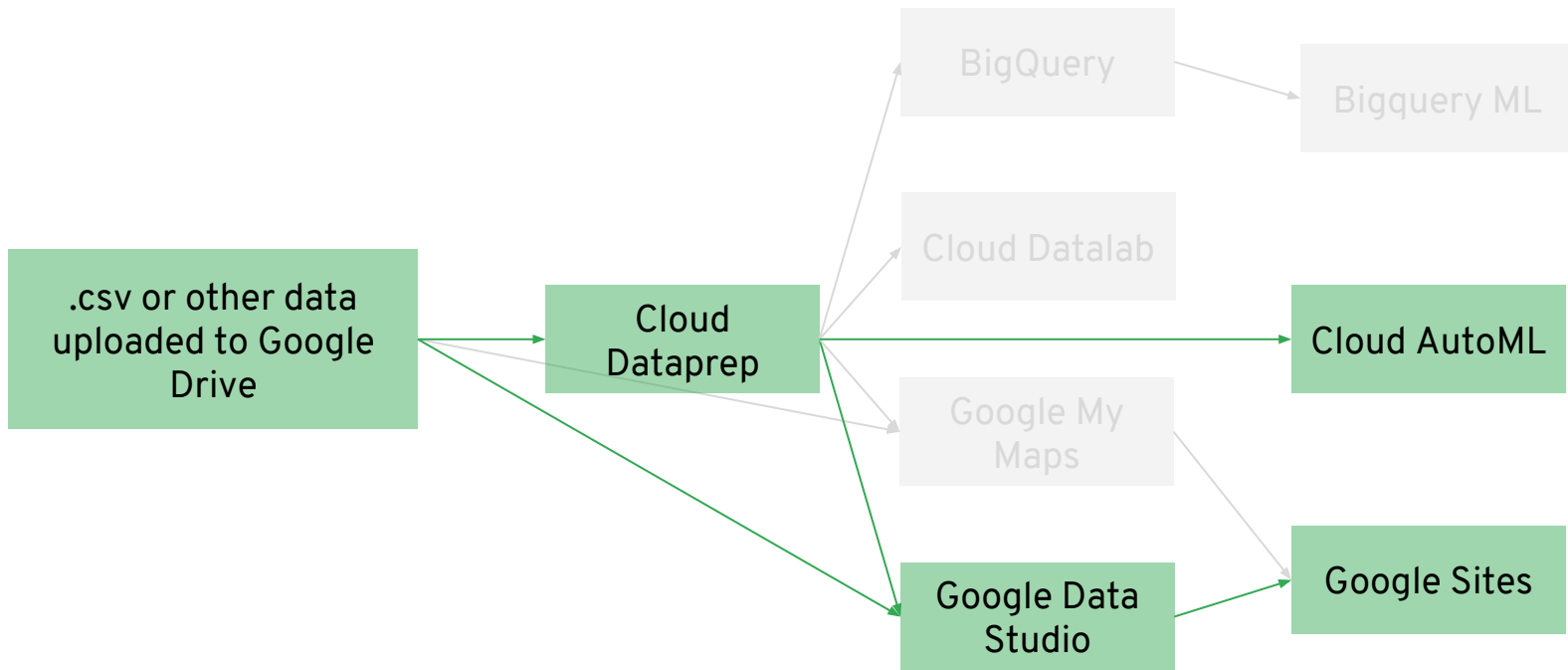
Researchers have a range of needs/experience and could either follow a more tech or humanities path



Entrepreneur



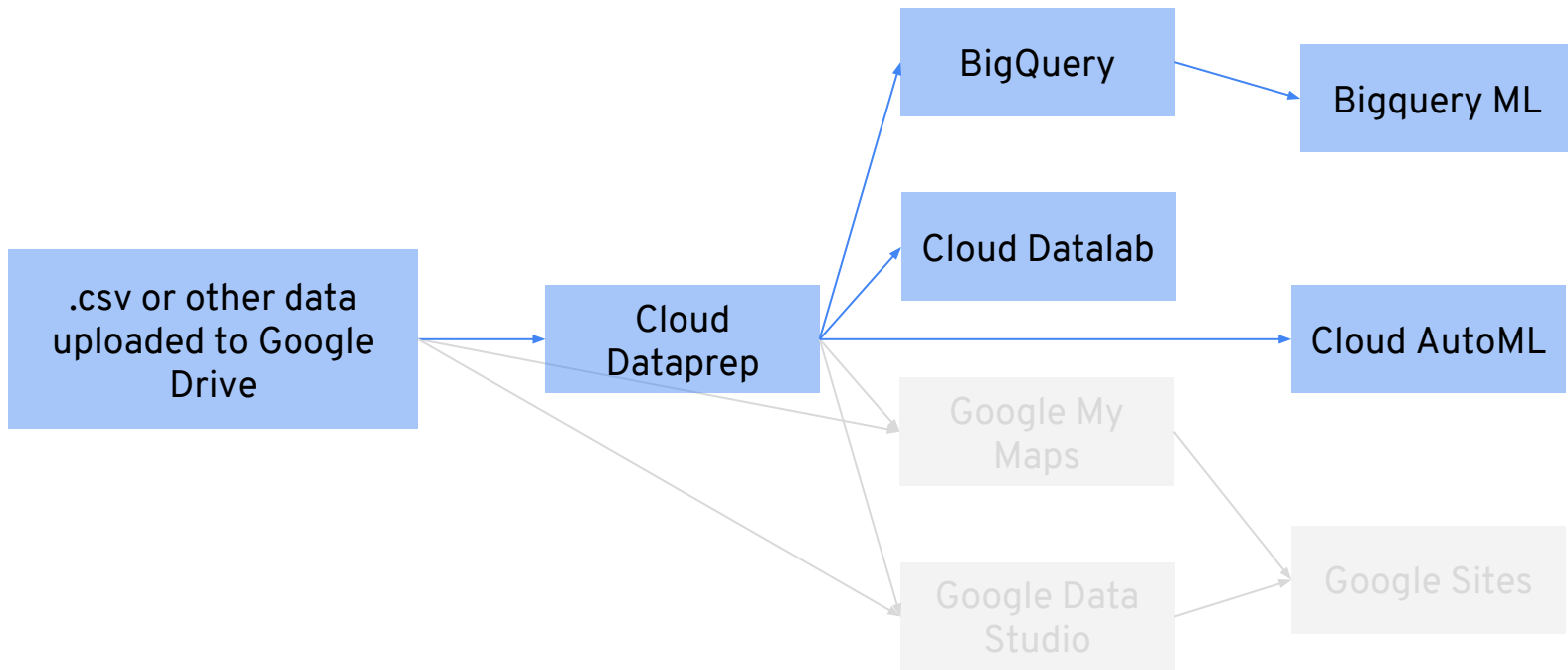
Many entrepreneurs need to present data about their business, some may use ML to create products



Tech 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

Open with Google Sheets

Connected apps

- Google Sheets

Suggested Google Cloud Platform apps

- Google Data Studio
- Google Cloud Dataprep
- Google My Maps

When a user tries to open a .csv file, for example, they can be introduced to other GCP apps that might be useful in analyzing the data using the drop down menu.

Open with Google Sheets

Information

Data Studio easily turns your data into informative reports and dashboards that are easy to read and fully customizable.

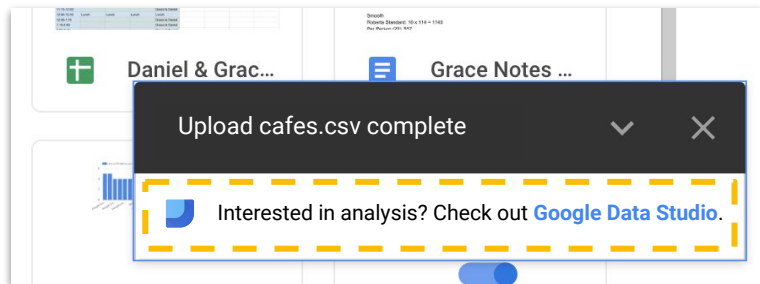
[Learn more.](#)

When the user clicks the information icon, they can read a brief overview of the products and be linked to more information about the product.

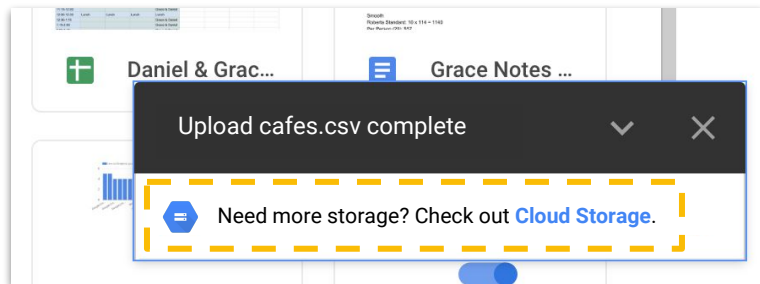
Google Drive Links



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



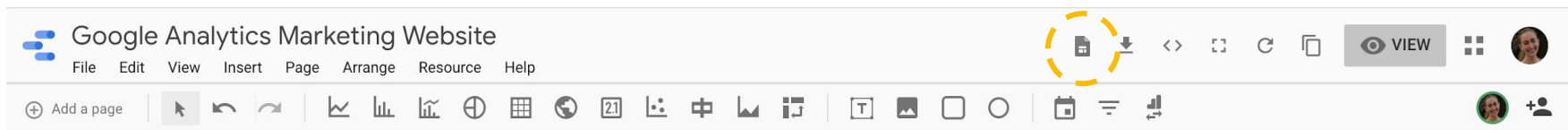
After a user uploads a file, customized pop-ups appear based on both the type of file and the size of the file. Such pop-ups link users to Google Data Studio, a platform for data analysis and visualization, and Cloud Storage, a storage solution for large files.



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.

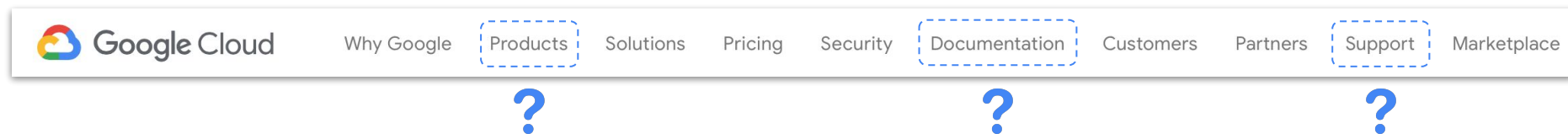
Understand

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:

~15 seconds

Technical students took:

~2 seconds

Humanities students took:

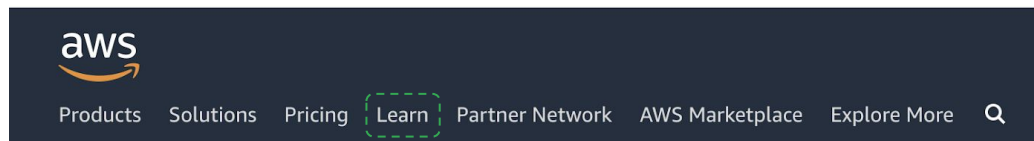
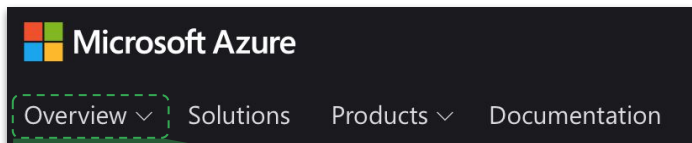
>1 minute

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.

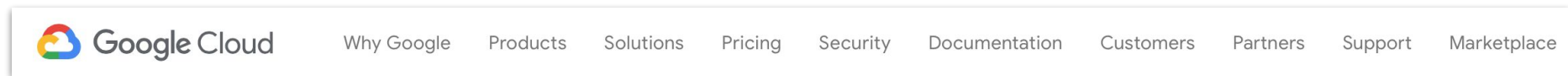
In a similar manner, Amazon makes it clear for users how to quickly get started working and integrating Amazon Web Services through the “Learn” menu option.

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

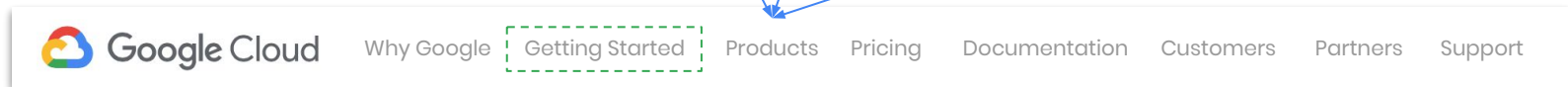
Changing Google Cloud Menu



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



Humanities

Humanities students mention DeCals as a great platform to pick up skills and learn programs

GCP can hire a student ambassador to teach a DeCal on that



Technical

Tech and CS students tend to stick with the first programs they are exposed too.

Introducing the GCP in freshman classes converts them to long term users



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.

Berkeley SKYDECK



THE HOUSE FUND



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.

NOV
21

HBSA | DSSB Data Analytics SQL Workshop
Public - Hosted by Haas Business School Association (HBSA)