



THE ROLE OF GOOGLE SITES IN DEVELOPING E-CONTENT FOR ACADEMIC LIBRARY DURING COVID 19: A REFERENCE TO WEEKLY ANALYTICS REPORT.

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Abstract:

In the mid-1990s, two students from Stanford University planned to develop an online search engine, Google. The name Google was derived from the word “googol” which meant a mathematical term for 1 followed by 100 zeroes. Over the years, it became the largest search engine globally. Today the Google came up with technology innovations through introduction of new apps & services like Gmail, YouTube, Maps, Play store, Drive, Chats, calendar, Translate, Photos, Shopping, News, meet, my ad center, forms, google store, travels, classrooms, dock, sheets, finance, sites, books etc. Google's expansion supports to the personal development, the fact that most goods and services are provided for free and with social purpose. In this paper demonstrates how Google services and products assist academic libraries in providing services and how PUMBA Library utilized Google services during a lockdown situation. By utilizing Google sites while under stringent lockdown, PUMBA Library has created e-content for users. A significant part of creating e-content was played by Google sites, Gmail, Books, and Drive.

A weekly analytical report shows average daily traffic in a week, popular content or pages of the sites, country with city, mobile handset of users who use this sites. This report shows usage of the e-content developed by library.

Keywords: Google, Google Sites, Drive, Books, Gmail

Objectives of the study

- To understand the role of Google site during the lockdown
- To know the Google product and services
- To study the weekly analytics, report of Google site

Scope of the study: - The study's scope includes all library patrons who visited these websites for analysis during a week.

Limitation of the study: - The study's limitation is that it only takes into account a one-week analytical report during the lockdown.

1 **Introduction:** The Covid-19 invaded the world very fast and the first response of every country was lockdown. It brought the whole life to standstill and suddenly everything got paused for a while. Many industries had seen an unprecedented impact due to the lockdown and it will take long time to recover after this unforeseen impact. In India, Lockdown was declared on 24th March 2020 to avoid the spread of Corona Virus. Everything was stopped during pandemic, it would have a significant influence on each and every individual, family, community, organization, industry, etc. everyone was locked, but nobody stopped. Everyone did something good for each other to overcome problems and to survive of the life. The present chapter shows that how Google played an important role in pandemic situation and how PUMBA library reached out to the users and provide them library services.

After declaration of lockdown, maximum education activities like lectures, seminars, conferences, Orientations, training session, guest lectures are started initially through the Zoom link and later on Team link and other sources etc. Libraries of all over the world including India shared user name and password among library users to provide virtual access to online databases. This remote access facility provided access to the e-books, research articles, videos, audios etc. the group of the librarians affiliated to the Savitribai Phule Pune University had developed e-content studio under the Learning Management System (LMS). The responsibility of each subject were assigned to individual librarian to collect data from the respective teachers/ persons and upload in the systems according to the guidelines. Everyone were tried to give some information resources to their users. During lockdown period full text newspapers, link for open source databases, copyright free full text books were available through WhatsApp. PUMBA library was engaged in to develop subject wise e-content as per course run by the institute with the help of Google sites.

We can list out some sites and apps who may called Covid warriors. Because their role in the covid was remarkable, we didn't stop because of some social sites and apps engaged to provided their service even in the lockdown e.g. Whatsapp, Zoom, Google, Team, YouTube, WHO websites, Indian Medical Organizational sites etc. some entertainment app, electronic devises like Mobile, TV, Laptop, iPhone, iPad and the other hand electricity as well as companies who provided the internet like Jio, Vi etc. all could be known as Covid warriors. The present paper shows how PUMBA library use Google facilities to developed e-content during lockdown period.

2 **Google Growth:** Google Inc. was incorporated in Menlo Park, California, registering the domain of google.com with the initial investment of US\$1.1 million in 1998. In the same year, Google was rated among the top 100 search engines. Google also developed branded desktop products, mobile products, web products and hardware products under each domain of competitions to succeed. Google started to build the data centers at various places. Google introduced many new products like Google SMS, Google

Groups, Google Mini, Google Maps, and Google Earth to users. The following table provides the details of the various products and services offered by Google to its customers.

Google Products and Services	
Category	Products & Services
Advertising	AdWords AdSense
Services	Alerts
	Answers
	Blog Search
	Book Search
	Catalogs
	Custom Search Engine
	Directory
	Dodgeball
	Finance
	Gmail
	Groups
	Images
	Labs
	Product Search
	Local
	Maps
	Mobile
	News
	Personalized Homepage
	Personalized Home for Mobile
	Personalized Search
	Reader
	Scholar
	Webmaster T
	Special Searches
	Video
	Web Search
	Web search features
Tools	Analytics
	Blogger
	Calendar
	Code
	Desktop
	Earth
	Hello
	Maps for Mobile
	Notebook
	Pack
	Picasa
	Talk
	Toolbar
	Translate
Enterprises Solutions	Google Search Appliance
	Google Mini
	Google Desktop search for the Enterprises

Table 1 Google Products and Services

(Source: Sangeetha, K.& Sivarajadhanavel, P. (2007). *Google's Growth: A success story*. ICFAI)

3 Google Sites: Enterprise social networking was available from the software company JotSpot. It was purchased by Google in 2006 and rebranded as a Google site. websites made by users utilizing Google Page Sites. Users needed a domain name, however this service was free. Google completely redesigned the Google Sites platform in June 2016 and announced a timeline for moving away from Classic Sites. The JotSpot technology is not used on the new Google websites. The updated Google Sites will be the standard website construction tool starting in August 2020.

3.1 Features of Google sites: following features launched by Google in sites.

- 3.1.1 Works with Google Drive:** It includes Google drive application. Users can store PDF or other documents in the Google drive and give access through the Google sites. this is easiest way to provide documents with client.
- 3.1.2 Designed for collaboration:** With real-time co-editing and the same strong sharing controls used to in Drive and Docs, Sites makes collaboration simple. users may collaborate and view each other's edits.
- 3.1.3 Secure site, without requiring IT:** Users may easily control ownership and sharing permissions in Sites with just a few clicks, just like they would with a Doc. The original permissions for embedded content are kept, allowing for dependable, fine -grained control.

3.2 Benefits of Google sites

- 3.2.1 Effortless team sites:** Simple settings, clear icons, and ready-made pages with colour schemes are all available so users may construct websites with little effort.
- 3.2.2 Easy to use:** Users can easily understand how to drag and drop the content, how to prepare button, how to create pages or sub-pages. So it saves the time of users.
- 3.2.3 No programming or design skills needed:** the important benefit is that no programming knowledge required to develop web page. If users have skill to design web page, then they can easily build website.

3.3 Process of Designing PUMBA Open access e-content:

- 3.3.1 Understanding strength and weakness
- 3.3.2 Collecting softcopies of the syllabus course wise
- 3.3.3 Designing course wise pages and sub-pages
- 3.3.4 Identifying relevant books & full text access from the Google books & other source of internet.
- 3.3.5 Testing hyperlinks with mobile view pages
- 3.3.6 Published and shared among user's groups.

3.4 PUMBA Google sites:

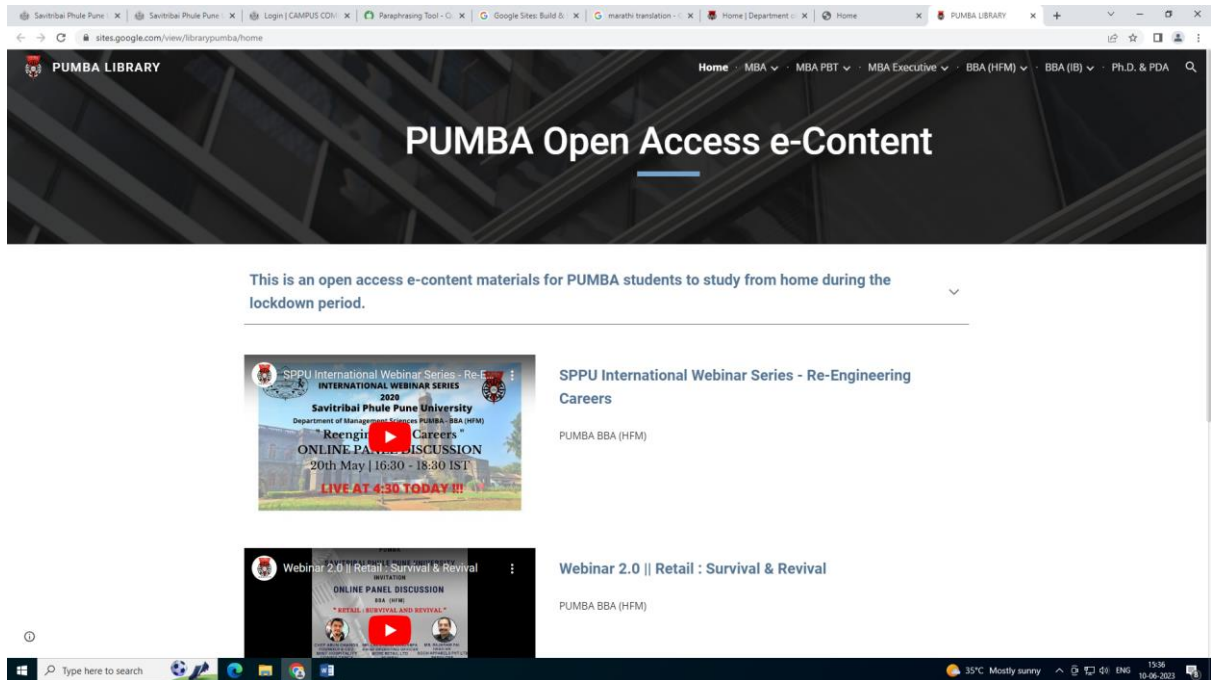


Figure 1. PUMBA Google sites-1

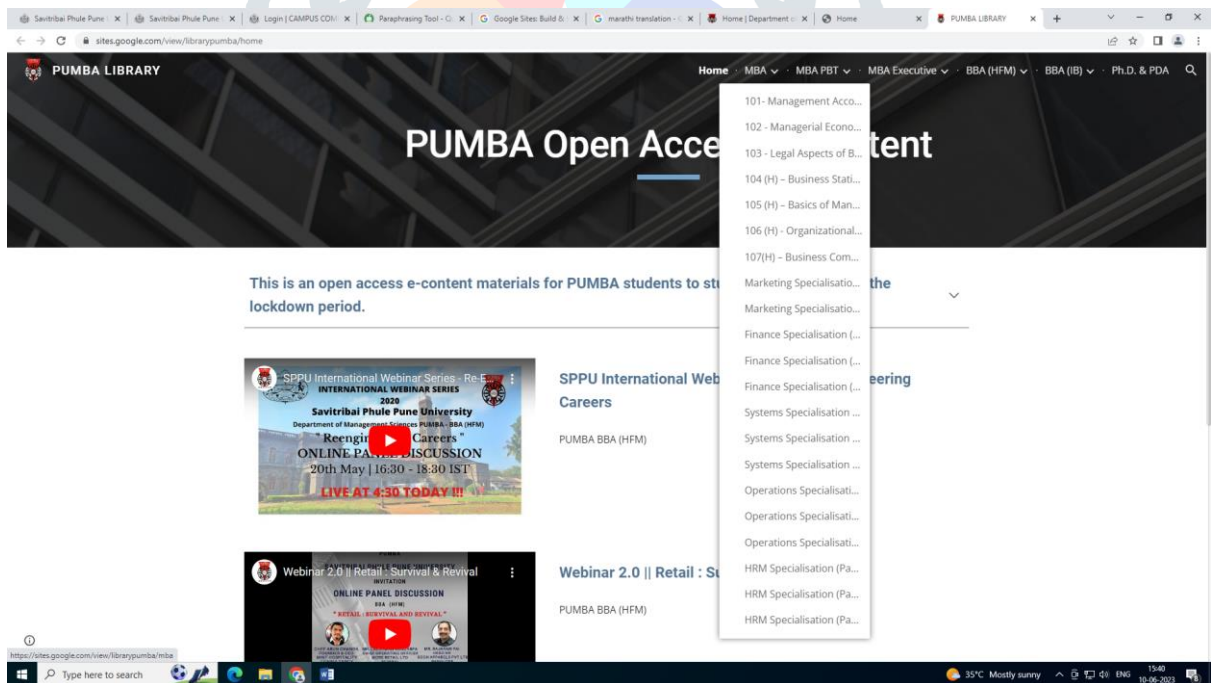


Figure 2. PUMBA Google sites-2

4 Google Books: In 2002 A group of team members at Google officially launch the "secret 'books' project. In December 2004 Google announced partnerships with several high-profile university and public libraries, including the University of Michigan, Harvard (Harvard University Library), Stanford (Green

Library), Oxford (Bodleian Library), and the New York Public Library. According to press releases and university librarians, Google planned to digitize and make available through its Google Books service approximately 15 million volumes within a decade by Wikipedia contributors.

The researcher has used google books services while developing e-content during the COVID 19. Google books has facility to view maximum books pages on free of cost by just clicking. Researcher has just made list of books which are recommended in the syllabus of each course and provide link to the Google books to view pages.

- 5 **Google Drive:** copyright free full text content store in Google drive free content storage space policy to generate hyperlink. Such hyperlink also used in the content development collection.
- 6 **Analysis of Weekly Analytics Report:** The Google stat counter is the source of this analysis. With the use of the Stat Counter weekly analytics report, researchers were able to determine the value of the Google site created during COVID 19.

6.1 **Daily Traffic Breakdown:** - The table no.2 shows that what were the daily traffic of this site. The week showed in the below table is choosing of 22 Mar - 28 Mar 2021.

	Page Views	Unique Visits	First Time Visits	Returning Visits
Mon	5	4	3	1
Tue	5	5	4	1
Wed	8	8	6	2
Thu	4	4	3	1
Fri	1	1	1	0
Sat	4	3	3	0
Sun	4	4	2	2
Total	31	29	22	7
Avg	4	4	3	1

Table 2. Daily Traffic Breakdown

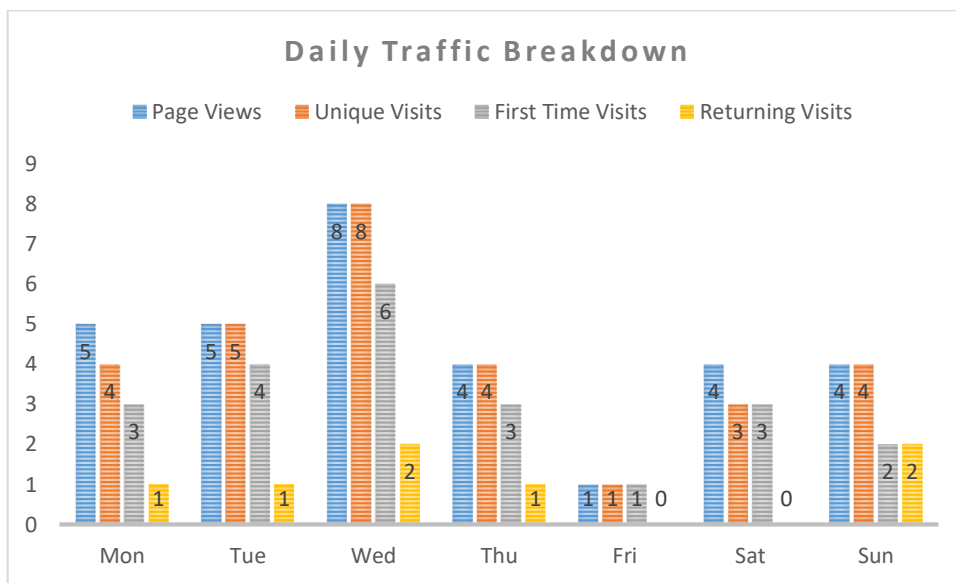


Figure 3. Daily Traffic Breakdown

Interpretation: This daily traffic breakdown data shows that Wednesday had the highest number of visitors, who were also classified as unique visits and page views. Six users were first-time visitors, while just two people were counted as repeat visitors. Overall, the data indicated that when a visitor visits the website, the number of repeat visitor’s decreases. It's possible that they don't need to return because they have enough information or other options with them. However, it also demonstrated how good the unique visitor to this website is.

6.2 City & Country: The table number 3. Shows the rank list of city, region and country visited to this sites. Maximum page views by city considered as rank one.

City & Country

Page Views	City	Region	Country
16	Pune	Maharashtra	India
8	Dhaka	Dhaka	Bangladesh
6	(unknown city)		India
3	Lucknow	Uttar Pradesh	India
3	Nashik	Maharashtra	India
3	Mumbai	Maharashtra	India
2	Kathmandu		Nepal
2	Bhiwandi	Maharashtra	India
1	Itahari		Nepal
1	(unknown city)		Nepal
1	Navi Mumbai	Maharashtra	India
1	Nagpur	Maharashtra	India
1	Chanda	Maharashtra	India
1	Ambala	Haryana	India

Table 3. Visited City & Country

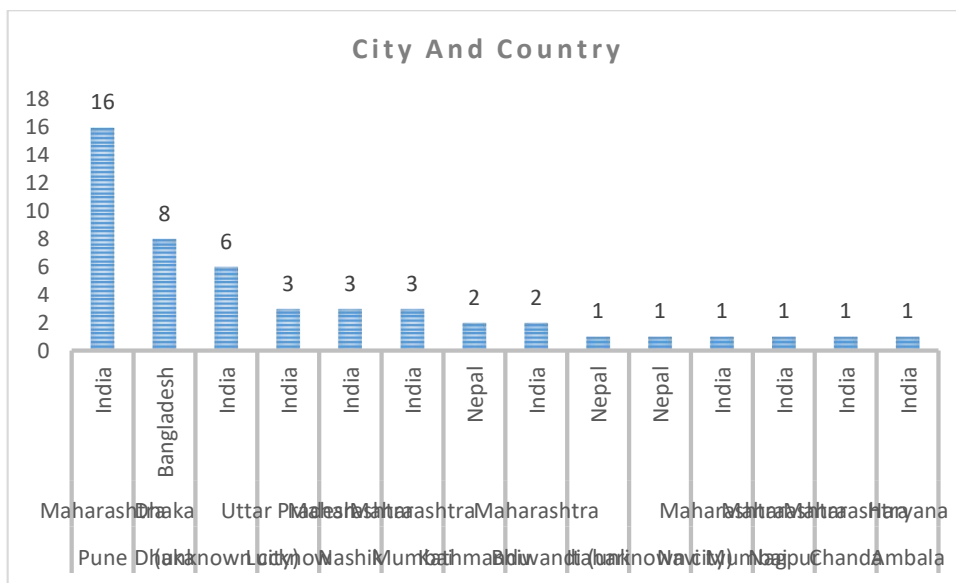


Figure 4. City and country

Interpretation: The aforementioned table and figures displayed the ranking of cities, regions, and countries based on the quantity of visits. It shows that Pune, Maharashtra, India, has received the most visits to this website. Because the college is located in the same city, Pune was home to the majority of the students. Bangladesh garnered the most views overseas, followed by Nepal. The fact that overseas students could access the e-content during COVID 19 was a major accomplishment for the site's intended purpose.

6.3 Use of Browsers: -

Page Views	Browser	%
16	Chrome 89.0	51.61%
7	Chrome for Androi	22.58%
5	Opera 74.0	16.13%
2	Firefox 86.0	6.45%
1	Chrome iPad	3.23%

Table 4. Use of Browsers

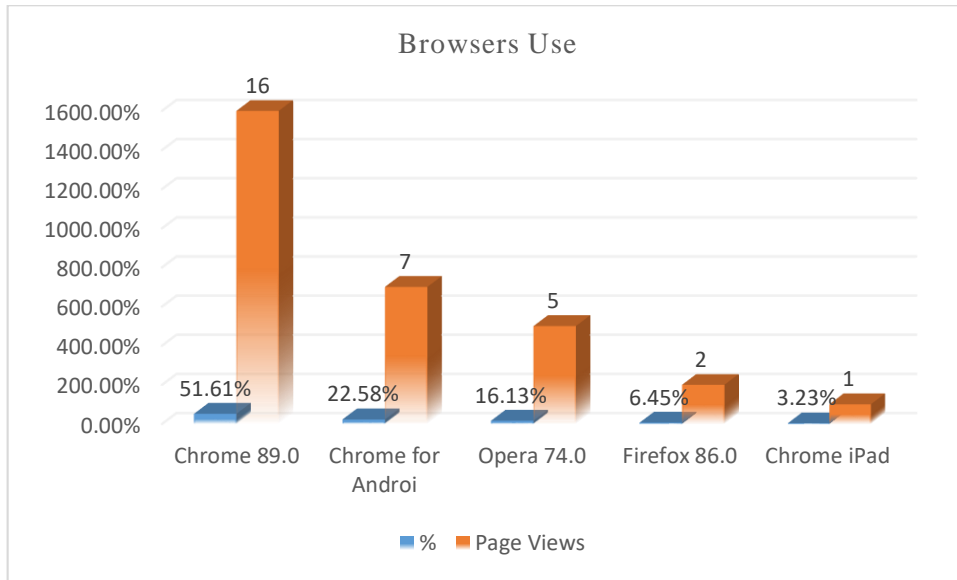


Figure 5. Use of Browsers

Interpretation: - The data indicates that the majority of users, or 51.61%, visit websites using the Chrome 89.0 browser. During a one-week period, 16 viewers used the Chrome 89.0 browser, followed by 7 viewers using the Chrome for Androi browser and 7 viewers using Opera 74.0. Overall, it shows that the majority of users access the internet using Chrome browsers. Once more, Google built the Chrome browser, therefore to sum up, the company plays a significant influence in the education industry, particularly in lockdown.

6.4 Use of ISP (Internet Service Protocol)

Page Views	ISP	City	Country
6	Jio	Pune	India
5	Fastway Transmission Private Limited	Kurukshetra	India
4	Airtel	Pune	India
4	Invention Technologies Limited	Dhaka	Bangladesh
2	Nepal Telecom	Kathmandu	Nepal
2	Grace Teleinfra Pvt	Pune	India
2	Esto Media Private Limited	Chanda	India
2	Act Fibernet	New Delhi	India
1	Typhoon Communication Pvt.	Pune	India
1	Airtel Broadband	Pune	India
1	Asknet Internet Service	Bhiwandi	India
1		-	India

Table 5. Use of ISP

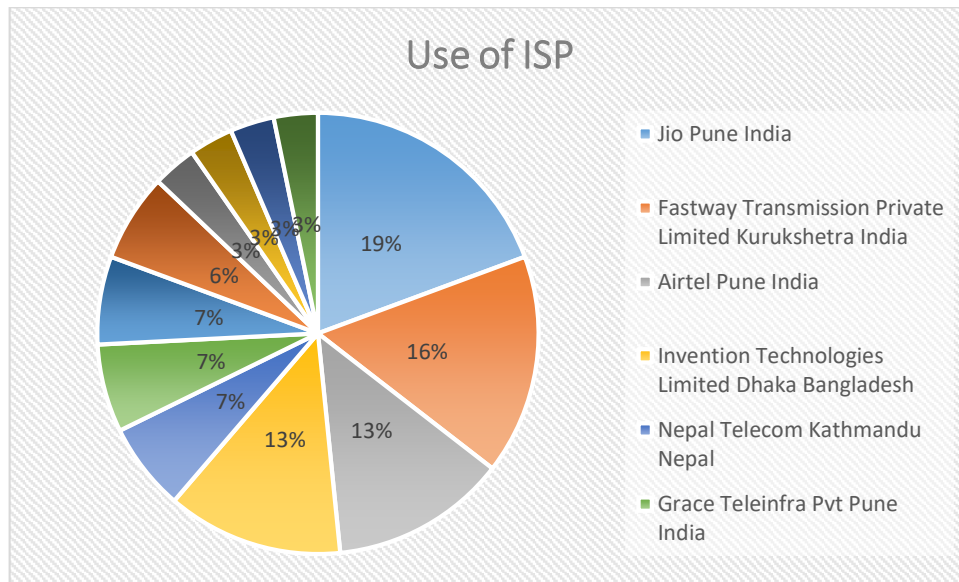


Figure 6. Use of ISP

Interpretation: The aforementioned table and numbers show that the majority of users—19%—use Jio Pune India ISP, with 16% going to Fastway Transmission Private Limited in Kurukshetra, India. Airtel Pune and Invention Technology Limited in Dhaka, Bangladesh, on the other hand, reported comparable use, or 13%. All things considered, it also demonstrated how Jio competes with Airtel Pune and Kurukshetra.

6.5 List of Pages views: - The below is the link of entry-pages & exit pages of this site.

Entry Pages

Page Views	Entry Page
1	https://95928186-atari-embeds.googleusercontent.com/
1	https://715578973-atari-embeds.googleusercontent.com/
1	https://629082905-atari-embeds.googleusercontent.com/
1	https://597933420-atari-embeds.googleusercontent.com/
1	https://474126692-atari-embeds.googleusercontent.com/
1	https://430787787-atari-embeds.googleusercontent.com/
1	https://313811560-atari-embeds.googleusercontent.com/
1	https://293432663-atari-embeds.googleusercontent.com/
1	https://205382715-atari-embeds.googleusercontent.com/
1	https://2032167167-atari-embeds.googleusercontent.com/
1	https://2018545629-atari-embeds.googleusercontent.com/
1	https://1845212415-atari-embeds.googleusercontent.com/
1	https://1820546449-atari-embeds.googleusercontent.com/

1	https://1789603799-atari-embeds.googleusercontent.com/
1	https://1757407801-atari-embeds.googleusercontent.com/embeds/16cb204cf3a9d4d223a0a3fd8b0eec5d/inner-frame-minified.html?jsh=m%3B%2F%2Fscs%2Fapps-static%2F%2Fjs%2Fk%3Doz.gapi.en.RrjSsKk8Szw.O%2Fam%3DAQ%2Fd%3D1%2Fct%3Dzgms%2Frs%3DAGLTcCPwd_oodKkRT_hYRO1I-9xRcQV4oQ%2Fm%3D_features

Exit Pages

Page Views	Exit Page
1	https://715578973-atari-embeds.googleusercontent.com/
1	https://702975755-atari-embeds.googleusercontent.com/embeds/16cb204cf3a9d4d223a0a3fd8b0eec5d/inner-frame-minified.html?jsh=m%3B%2F%2Fscs%2Fapps-static%2F%2Fjs%2Fk%3Doz.gapi.en.RrjSsKk8Szw.O%2Fam%3DAQ%2Fd%3D1%2Fct%3Dzgms%2Frs%3DAGLTcCPwd_oodKkRT_hYRO1I-9xRcQV4oQ%2Fm%3D_features
1	https://597933420-atari-embeds.googleusercontent.com/
1	https://573644295-atari-embeds.googleusercontent.com/
1	https://474126692-atari-embeds.googleusercontent.com/
1	https://440574361-atari-embeds.googleusercontent.com/
1	https://430787787-atari-embeds.googleusercontent.com/
1	https://313811560-atari-embeds.googleusercontent.com/
1	https://222205688-atari-embeds.googleusercontent.com/
1	https://205382715-atari-embeds.googleusercontent.com/
1	https://2032167167-atari-embeds.googleusercontent.com/
1	https://2018545629-atari-embeds.googleusercontent.com/
1	https://1943141974-atari-embeds.googleusercontent.com/
1	https://193577737-atari-embeds.googleusercontent.com/embeds/16cb204cf3a9d4d223a0a3fd8b0eec5d/inner-frame-minified.html?jsh=m%3B%2F%2Fscs%2Fapps-static%2F%2Fjs%2Fk%3Doz.gapi.en.RrjSsKk8Szw.O%2Fam%3DAQ%2Fd%3D1%2Fct%3Dzgms%2Frs%3DAGLTcCPwd_oodKkRT_hYRO1I-9xRcQV4oQ%2Fm%3D_features
1	https://1845212415-atari-embeds.googleusercontent.com/

7 **Conclusion:** Even though everyone was stuck at home during the lockdown, they all took action in their respective fields of expertise. Even when everything stopped, nobody stopped. Science and technology deserve this recognition. Technology teaches us how to live well, while science teaches us how to survive.

This paper focused on Google's involvement in the shutdown. The researcher first located the Google books that were referenced in the relevant syllabus by using Gmail to gather the syllabus. The researcher used Google Sites to further construct the webpage. and once more disseminated via Gmail among library patrons. Thus, the library communicates with its patrons during lockdown in this manner. The study that follows is based on just one week of the lockdown. This Google website is still operational and is viewed by users. The issue with Google Books is that it only provides a small number of pages for viewing. However, we discovered that certain books have more pages to look at. The library distributed scanned copies of those pages to users in need while adhering to copyright policies. Prior to receiving the copies, users were required to submit a Google Requisition form to the library. Students were satisfied with the services they received from the library in this fashion, and Google made it possible.

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- Wikipedia contributors. (2024, March 9). Google Books. In *Wikipedia, The Free Encyclopedia*. Retrieved 12:21, March 11, 2024, from https://en.wikipedia.org/w/index.php?title=Google_Books&oldid=1212686038
- <https://sites.google.com/view/librarypumba/home>