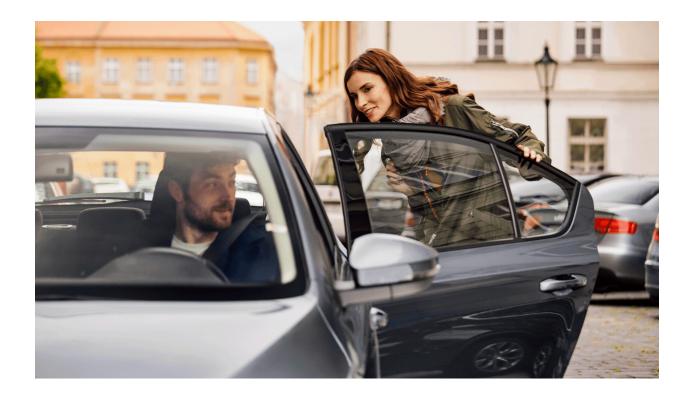**Uber leverages the powerful integration of Google AppSheet with Google Workspace and Google Apps Script to maintain and even improve on the critical capabilities once provided by a third-party Google Admin console tool.**

Google Workspace Results

- ○ Enabled the Executive Support Team to manage Gmail settings as administrators.
- ○ Streamlined administration for thousands of room resources.
- ○ Enabled the easy management of settings and permissions for over 100,000 Google Groups.
- ○ Used automation to reduce time to resolution (TTR) by more than 95%.
- ○ Onboarded 289 users, 65 of whom are active monthly users.

While millions of riders, drivers, and couriers around the world immediately associate Uber with its sleek and streamlined mobile app that makes getting people and things from A to B a snap, many complex organizational processes must also run smoothly behind the scenes for Uber to keep delivering this high-quality digital user experience.

Uber's Business Technology Engineering Team is responsible for making sure that many of these internal processes at Uber go off without a hitch, especially when it comes to guaranteeing that Uber's employees and contractors can efficiently and securely collaborate. The Business Technology Engineering Team accomplishes this objective by giving internal stakeholders impactful tools that help them achieve their goals, designing system configurations, assisting with third-party app integrations to existing tools, and developing internal automations.

The Business Technology Engineering Team is often called on to assist other teams within the company. For many years, Uber's Service Desk Team — and, by extension, the Uber employees they support — depended on an additional Google administrator user interface (UI) layer provided by a third-party tool. They used this third-party tool to access essential time-saving administration features that weren't natively available in the standard [Google Admin](#) console. This UI layer supported hundreds of users and thousands of interactions per month.

While evaluating opportunities to reduce operating expenses, Uber carried out a cost-benefit analysis on the tool. Due to the significant annual investment required to continue using the third-party UI layer, the Business Technology Engineering Team began looking for alternatives to the tool. As a result, Uber's Service Desk Team and the employees they served would need another solution that could provide enhanced Google Admin console functionality they relied on. Because this team was small, however, it had limited scope to create a solution that would restore the capabilities the UI layer once provided.

Using AppSheet and Apps Script to create custom administrative tools and automations

"The integration with Apps Script was key. Without it, we wouldn't have been able to accomplish the goals we had set for the project."- Oscar Gonzalez, Senior Applications Developer, Uber

In June 2022, Uber attended a Google hackathon to learn more about the capabilities of Google AppSheet and assess whether it would be a suitable replacement for the UI layer. Although AppSheet was considered a relatively new product at the time, the Business Technology Engineering Team judged it the best choice for creating a replacement because of its cost-effectiveness and its deep integration with Google Workspace and Google Apps Script. The Apps Script connector for AppSheet enabled the team to create powerful services on the backend but use AppSheet to easily create the application front end.

"The integration with Apps Script was key. Without it, we wouldn't have been able to accomplish the goals we had set for the project," says Oscar Gonzalez, Senior Applications Developer at Uber. The Business Technology Engineering Team also appreciated that AppSheet could attach a familiar and user-friendly interface onto the front end of the replacement tool, creating a smooth transition to the new tool that was created.

In the course of just six months, the Business Technology Engineering Team used AppSheet to create a new internal app, primarily accessed via the web, to enable the crucial continuity of enhanced Google admin console features required by Uber's Service Desk Team and employees. The team was able to do so without compromising on key security imperatives.

The information found in Uber's new internal app is synchronized between multiple data sources (for example, Google Sheets and AppSheet's built-in database) and Google Workspace via various Google APIs such as the Admin SDK, Google Drive, Google Calendar, Gmail, and Google Groups. Some of this synchronization is also performed using Apps Script. For example, end users' Create, Read, Update, and Delete (CRUD) interactions are handled in real time

via Apps Script integrations that are native and triggered by the AppSheet events and UI.

The process of developing Uber's new internal app took some trial and error, but the Business Technology Engineering Team found the AppSheet documentation and user community helpful in getting up to speed and overcoming the challenges it encountered along the way. Uber received strong support from Google throughout the project.

Uber's new internal app now gives Uber's Service Desk Team as well as its IT Operations and Support Teams access to important administrative features that previously would have required knowledge of Google Apps Manager (GAM) scripting or repetitive and tedious manual steps. The app also enables broad visibility and the management of resources and groups with intuitive dashboards that don't natively exist in the Google Admin console.

Uber employees use AppSheet to streamline internal collaboration

"I see a lot of potential, especially for teams that aren't as technical."- Sean Patterson, Senior Applications Developer, Uber

When Uber employees need to collaborate, they must be able to quickly book the right resources for their meetings. The new internal app's room resource management capabilities enable easy creation, editing, sharing, and permissions settings for Uber's thousands of room resources. These capabilities support bulk actions, saving Uber employees even more time when they need to manage room resources. It can also schedule offline automation for these resources if desired. Analytics are straightforward, too, since it can generate reports with native filtering and AppSheet view exports.

The internal app allows the Service Desk Team to manage settings and permissions for more than 100,000 Google Groups at the company. The app's support for bulk actions comes in handy in just these kinds of situations, saving the Service Desk Team time they would otherwise have to spend performing manual configuration changes on multiple groups.

Gmail account management is also straightforward. The internal app empowers the Service Desk Team to manage Gmail account settings on behalf of any Uber employee, particularly executives and executive assistants. For example, Service Desk Team members can promptly adjust specific settings such as labels, delegates, vacation responders, filters, send-as, contacts, and others as desired.

Uber leverages AppSheet to boost productivity and reduce costs

Uber has already achieved impressive business outcomes by using AppSheet to create an internal tool that solved for their unique business process requirements. For starters, the company achieved an almost 98% cost

reduction from the previous third-party platform. The Business Technology Engineering Team onboarded 289 users, 65 of whom continue to be active monthly users.

The internal app has also enhanced productivity. For example, by eliminating the previously complex onboarding and approval process that was required to access GAM or spend time learning commands, the Business Technology Engineering Team was able to save anywhere from 2–24 hours of ramp-up time per user, depending on their level of experience. The new app also saved time for the Service Desk Team by introducing new automations like bulk actions, which were unavailable in the original tool. These automations reduced the manual effort invested and time to resolution (TTR) required by more than 95%.

By using AppSheet to create the new app, the Business Technology Engineering Team not only was able to maintain crucial continuity of the Google Admin console features required by the Service Desk Team and its users, but in some cases it was even able to provide a smoother, less disruptive user experience compared with the original third-party tool. The Business Technology Engineering Team can also develop new features at users' request in far less time than before. The result is a better internal customer experience for Uber employees.

AppSheet creates countless opportunities for improvement

"We can replace something with AppSheet very quickly and own it. We can automate something that's been this manual process forever."- Sean Patterson, Senior Applications Developer, Uber

Having successfully leveraged AppSheet to create a more useful and cost-effective replacement for the third-party console tool that the Service Desk Team once relied on, Uber's Business Technology Engineering Team sees even more opportunities to innovate using AppSheet in the future. For example, as Gemini in AppSheet evolves to include more advanced capabilities, the Business Technology Engineering Team expects it will become even easier to create additional apps that have a significant impact for internal and external customers alike.

"I see a lot of potential, especially for teams that aren't as technical," says Sean Patterson, Senior Applications Developer at Uber. "We can replace something with AppSheet very quickly and own it. We can automate something that's been this manual process forever. What would have taken us maybe a month before now takes us a day. So it's worth the effort to transition from one process to another. I think there are these kinds of opportunities all over the company — hundreds or thousands of these micro opportunities that exist. That's where we see AppSheet growing at Uber, both as a product and a platform."

*Google Workspace was formerly known as G Suite prior to Oct. 6, 2020.