

Metadata

Account	kaiser@uber.com	SEMANTIC
All Custodians	Kaiser, Roger	SEMANTIC
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Redacted	Yes	SEMANTIC
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Message

From: Scot Cheung [scot@uber.com]
Sent: 3/5/2021 4:06:03 AM
To: Roger Kaiser [roger@uber.com]; Sean McIntyre [sean.mcintyre@uber.com]
Subject: Re: S&I Data Analytics / Ops DS Newsletter - Feb 2021

(APAC Feedback)

Hey Roger - Some answers from the APAC side, added my two cents at the end. [@Sean McIntyre](#) - Hope this aligns with your thoughts, feel free to add.

1. Do we currently have any dedicated support on our team, Frank's team, and/or anywhere else?

- We previously had minimal DA/DS support and did most of the incident/opportunity analyses ourselves, especially when it came to North Asia Rides and Eats (as the data was unaudited and not in focus). ANZ/INSA was in a slightly better place with audited data, and would get direct help from Katy's team (under Frank) when needed (Sean to confirm), but I don't think it was dedicated support. INSA would also do their own analysis. As of 2021, Nikhil on Katy's team has been our APAC POC, though he's still ramping up and focused on cascading global updates.

2. If yes -- who and how dedicated are they? Looking for actual hours committed weekly -- 40 being full time.

- We have a biweekly meeting on APAC Safety KPIs with Nikhil, but less transparency to Nikhil's current day to day. With the establishing of the opportunity workstream, I would assume that Nikhil will spend more time on analysis that comes out from the monthly sync.

3. Regardless, is the current level of support that you have sufficient?

- No. There's a lot more that can be done.

4. If not, help me understand the gaps. Where are the areas that we are suffering without this support.

- I think the 2021 workstreams of "Opportunity Analysis" and "Self-serve dashboards" hit the nail on the head. The biggest pain point the team is the lack of tools to identify what's driving incident rate trendlines and spikes. Dashboards with more dimensions such as segmentation by accused party (driver, rider, eater), product flow (uberX, moto, taxi, cyclists, walkers), occasions (time of day, weekday, weekend, party hours, late night). Historically, such analyses has been done by the team themselves.

- Ideally we would want dedicated DA/DS support where the role is to continually generate data insights on APAC markets, basically identifying gaps in our processes from the data, and then for the Safety Ops team to drive projects that help mitigate those gaps. My hope is that Nikhil's new role as APAC POC is to take this up, though I agree that it would be easier (and closer to the team) for this role to be in-market.

On Tue, Mar 2, 2021 at 12:21 AM Roger Kaiser <roger@uber.com> wrote:

Team-

I'm going to meet with Sunny next Monday to discuss the long-term DA/DS needs of Safety Ops and whether we need to be going to Gus/Frank with an HC ask on this. In advance of that meeting, I would like to have a better understanding of the current level of support that we have on the team. For each region, Platform Identity and Platform Safety (@Hannah please proxy for platform safety), I'd like to understand the following:

1. Do we currently have any dedicated support on our team, Frank's team, and/or anywhere else?
2. If yes -- who and how dedicated are they? Looking for actual hours committed weekly -- 40 being full time.
3. Regardless, is the current level of support that you have sufficient?
4. If not, help me understand the gaps. Where are the areas that we are suffering without this support.

Just to give you an idea of where my head is at right now -- I think the most optimal solution is likely having embedded full support DA/DS who then dot into Frank's team -- with a manager on Frank's team driving alignment, consistency, and deduplication of efforts across the board. Or some version of that.

Let me know your thoughts.

-Rog

roger.kaiser | global safety and risk support | +1.571.424.0264 | uber

----- Forwarded message -----

From: **Roger Kaiser** <roger@uber.com>

Date: Mon, Mar 1, 2021 at 10:05 AM

Subject: Re: S&I Data Analytics / Ops DS Newsletter - Feb 2021

To: Sunny Wong <sunny.wong@uber.com>

Cc: Frank Chang <frank@uber.com>

Thank you, sir!

roger.kaiser | global safety and risk support | +1.571.424.0264 | uber

On Mon, Mar 1, 2021 at 9:37 AM Sunny Wong <sunny.wong@uber.com> wrote:

Hello Roger,

Happy to help out. I'll put some time on your calendar.

- Sunny

On Mon, Mar 1, 2021 at 6:42 AM Roger Kaiser <roger@uber.com> wrote:

Thanks, Sunny. Frank suggested we connect and discuss how I should be thinking about longer-term DA/DS needs for safety ops. Right now I've got folks in each region that are either fully dedicated or naturally technical (not dedicated). I need to think about what the laundry list of asks/needs are for my team as well as how I should be positioning those needs as resource asks from Frank/Gus.

Can you help?

-Rog

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On Mon, Mar 1, 2021 at 6:40 AM Sunny Wong <sunny.wong@uber.com> wrote:

Thanks, Frank.

Regarding your comments, I added some notes in-line.

CPF reclamation in Brazil

- Announcement talks about fraud and safety, but the Plan only includes safety impact. Maz / Guoyu would be the right ppl to keep informed here.

Thanks for the tip. We'll keep them in the loop.

WRP

- The reductions are eye-popping (78.9%) with no caveats or assumptions. The issues with this is 1) reduction is based on <100 incidents (guessing from the driver count) and likely to be volatile / not reproduceable and 2) published numbers like these have long memories in decks.

- Can I sit with everyone (DA/DS/PM/Ops/etc.) involved to do a deep review of numbers and communications on this product? I need to ensure consistency across the broader DA / DS team on how to level-set business partners.

Yes, happy to sit down to review with you. I'll coordinate with Rebecca on getting something scheduled.

Audio Recording

- Glad we've dedicated resource to analyzing this!

- Is Eng / PM looking into Missing Audio to ensure the product is working 100%? Probably not a q for you, but perhaps Elva / you can bring it up at a product meeting. We do not want to miss a critical recording.

I believe this is about the bug on iOS where audio files were not being attached which Eng was already looking into. Regardless, I'll check-in with the team on this.

- Sunny

On Mon, Mar 1, 2021 at 12:22 AM Frank Chang <frank@uber.com> wrote:

Thank you, Sunny!

A lot of stuff here, a few comments below plus a few I added to PRD's and decks.

Driver Crash Report Funnel Analysis

- Useful for the larger funnel analysis. Great to see Olivia's work highlighted!

CPF reclamation in Brazil

- Announcement talks about fraud and safety, but the Plan only includes safety impact. Maz / Guoyu would be the right ppl to keep informed here.

WRP

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Audio Recording

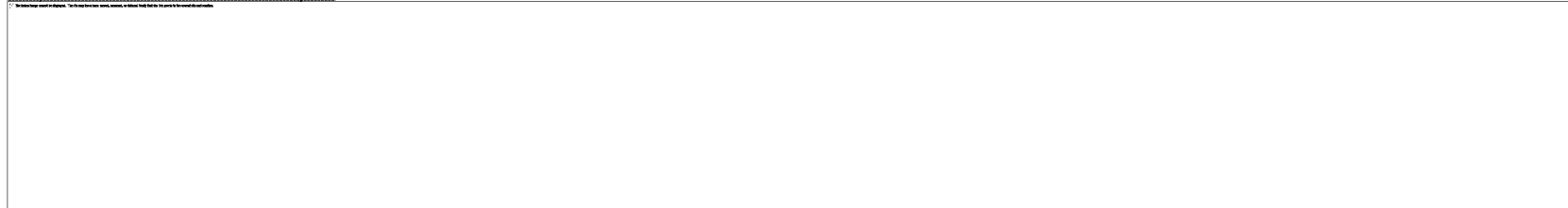
- Glad we've dedicated resource to analyzing this!

- Is Eng / PM looking into Missing Audio to ensure the product is working 100%? Probably not a q for you, but perhaps Elva / you can bring it up at a product meeting. We do not want to miss a critical recording.

Frank

On Sun, Feb 28, 2021 at 9:09 PM Sunny Wong <sunny.wong@uber.com> wrote:

[Request to be added to the mailing list](#)



February 2021

[Newsletter Archive](#)

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Welcome to the Safety and Insurance Data Analytics / Ops Optimization DS Newsletter! Our team comprised of Product Data Analytics, Business Intelligence, Regulatory/Litigation Data Analytics, and Operations Optimization DS provides timely and actionable analytical insights with the goal of helping improve safety for all participants on the Uber platform and optimizing insurance costs.

TLDR:

Two-Wheeler Safety

- **Safety Checklist and Helmet Detection:** Daily verification for 2 wheel couriers roll out Mar 2 in ANZ (local).
- **Courier Long Stop:** Courier Long Stop analysis and eng work is completed; awaiting Ops implementation in ANZ
- **Very Fast Bikes:** Adapting current APAC solution to US market and initial results are promising but requires further modification to fit the US market and city design.

Safe Identity / Safety Controls

- **CPF Reclamation:** CPF pass rate in the treatment group is 50.3%, compared to the control's 41.9% (+20%) and the 7-day SUFT in the treatment group is 38.2%, +10% compared to the control.
- **Rider ID Risk-Based Document Scan:** Proposal is under review to run an experiment that would allow for "lower risk" users (defined by SDM) to bypass DocScan verification in an effort to reduce the funnel impact of the verification process.
- **Rider Selfie:** Egypt and Ghana launched to 100% and the plan is to launch an Android version soon.
- **Mastermind Rule Review:** Rules have been separated into 1 of 5 different groupings, with the first group undergoing review starting at the beginning of March.
- **Women Rider Preference:** We are now seeing statistically significant improvement in the reduction of female WRP drivers' SA/SM and overall IPC incident rate when compared to female driver trips with WRP off. In addition, we are seeing a 21.1% increase in average driver supply hour per week for heavy WRP drivers in Brazil who are likely more casual drivers.
- **Ultrasound:** Launched new VYR UI in Illinois, Florida, Nevada, and Oregon.

Marketplace and Response

- **RideCheck:** Midway Stop detection now at 100% in LatAm. Survey results for Route Deviation in Brazil indicate users like it (87% of drivers and 92% of riders think the product is a valuable addition)
- **SDMv3:** The updated model with migration to v2 features and retraining is now deployed. From our analysis, we expect a 10-15% increase in recall in Brazil and Mexico. For Brazil first trip, we are able to reduce the trigger rates with same safety impact.

Safety Media

- **Audio Recording:** A new add-on, Driver Periodic Check-in, was launched in Brazil and Mexico to ensure the driver intends to keep recording which will keep drivers engaged and provide a better privacy narrative.
- **Dashcams:** BYOD video upload launched in 3 US cities (Philadelphia, Seattle, Denver) along with a monitoring dashboard.

Safety Operations

- **DACT 3.0: ML Framework:** We are working on an ML approach to DACT starting with the dangerous driving policy which has so far shown promise (+30% in lift in all DD tickets while reducing the number of driver flags by 57%).

- **uSights Brazil:** Conversion rate has held steady since launch to 3 small cities in January. The failure rate of 0.7% is very close to our target rate of 0.5%.

Road Safety / Insurance

- **Driver Crash Report Funnel Analysis:** We have started to deep dive into the crash report funnel to help understand opportunities with the product team including onboarding the data to Mixpanel for better visualization.

Regulatory / Legal

- **Legal** Redacted - Privileged
 - **Legal** REDACTED - PRIVILEGED
- REDACTED - PRIVILEGED**

Safety Data / Infrastructure

- **Deactivations:** Deactivation sharing updated to include Costa Rica and Mexico and Document Expiration sharing analysis completed to reduce manual transcription process.
- **Safety Incident KPI Dashboard:** Through collaboration with the Incident Analytics team, we have added an overview and regional breakdown tabs to our core safety incident KPI dashboards which will allow better slicing of data.

Team

Recruiting

Open Positions:

- Senior Data Analyst (SF)
- Data Science Manager (SF)

Accepted Not Started

- San Francisco
 - Kewei (Abby) Chen, Data Analyst I (2020 Summer Intern) - Mar 2021
 - Kanika Chopra, 2021 Summer Intern Data Analyst

Citizenship

- Todd presented to Claims teams on the topic of Legal Data and development opportunities
- Shivanie and Todd provided a training on Advanced Origami usage to US Claims Leads

Two-Wheeler Safety

Bike Safety Checklist + Helmet Detection

POC: Peter Photinos (p.p@) | Jheel (jheel@)

PRD - Helmet Detection | Helmet verification plan

Background: In 2020, 54% of Eats deliveries have occurred via bike, moped, or motorcycle (“2-wheel vehicles”). 2-wheel vehicle deliveries are 3.3x more likely to be involved in a serious crash than car deliveries and are accountable for 83% of global road safety incidents resulting in a fatality. 2-wheel deliveries

continue to grow, both in volume and as a % of Uber's total portfolio, representing an increased risk for courier safety and inviting regulatory scrutiny that can impact business continuity. Bikers will have to go through a checklist checking off on safety items such as wearing a helmet, working brakes, phone mount, lights, following traffic laws. In addition, in some regions, 2-wheel couriers will need to go through a helmet detection experience to verify they are wearing a helmet.

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Bike Safety Checklist Metrics:

- Checklist Blocker Tap to Go Online % (Breakglass metric)
 - **Definition:** # go online success / # of taps on checklist blocker
 - **Target:** >75% (similar to earner checklist but we will review it in launch week)

Helmet Verification Metrics:

- Helmet verification success rate
 - **Definition:** # helmet verification success / # helmet verification attempts
 - **Target:** >95%
- Helmet verification attempt rate
 - **Definition:** # helmet verification attempts / # helmet verification prompts
 - **Target:** >80%
- Supply Hour utilization
 - **Definition:** active supply hours/online supply hours
 - **Target:** less than 5% decrease

Plan:

- Rollout products in ANZ starting 3/2 (local) with daily checklist & helmet verification for 2 wheel couriers.

RideCheck - Courier Long Stop Detection

POC: Peter Photinos (p.p@)

PRD

Background: Currently, the UberEats business lacks the ability to detect serious road incidents that have occurred while courier partners are on-trip. The business currently relies on third-party notifications such as law enforcement, journalists, friends and family members, and Eaters to notify Uber of potential incidents. This adjusted RideCheck Long Stop heuristic will primarily focus on 2-wheel modalities: bikes and motorbikes. Once a Long Stop is flagged, we may consider post-detection signals (e.g., updated delivery status, courier movement, etc.) for a reasonable timeframe before triggering a notification to agents.

Project Updates:

- Analytics and Eng work completed for long stop crash detection.
- Process not yet live, waiting for ANZ Ops to build logic and train agents before reviews can begin.

Very Fast Bike Alerting

POC: Peter Photinos (p.p@)

PRD

Background: UberEats allows various modalities as delivery vehicles and one of them is 2 wheels/bicycle. The allowed modality is defined by the way the courier is onboarded (for example, if the courier is onboarded under Logistics flow, the courier is allowed to use a bicycle as a delivery vehicle but not a motorized vehicle such as a car). Of the couriers who are onboarded under bicycle-only flow, there are some who use motorized vehicles for delivery. This is a violation of modality compliance.

Updates and Plan:

- Working on adapting previous work used to enforce modality compliance in APAC to the US.
- Initial analysis shows the modality classification process will be applicable in US markets. It requires some changes to accommodate substantially larger US cities with highly variable road conditions.

Safe Identity / Safety Controls

CPF reclamation in Brazil

POC: Nengjun Zhao (nengjun.zhao@)

PRD | Experiment Plan

Background: For fraud and safety reasons, we allow only one rider UUID to be linked to a specific CPF number in Brazil, and we do not allow riders to reclaim that CPF number on another account. In the current process, the CPF verification fail/disallow rate is around 43%, given the verification that fail/disallow more than 80% were due to the ID_already_used. The CPF reclamation process will provide a new option for the riders and they will get a new account if they submit their ID for verification. With the reclamation process, we expect to have an improvement on the signup funnel. The goal of this experiment is to understand if adding a CPF reclamation option for riders who failed CPF verification because ID_already_used will have any impact on incidents rate on the platform while reducing friction to the rider onboarding process.

Project Updates:

- Conversion results in Brazil improved:

- The CPF pass rate in the treatment group is 50.3%, compared to the control's 41.9% (+20%). We have surpassed our goal of +10% pass rate and -50% failures (current failure difference is -54%).
- The 7-day SUFT in the treatment group is 38.2%, +10% compared to the control.

Plan:

- Waiting for safety impact results. If the results are positive (no change compared to control), we will expand to 100% in Brazil.

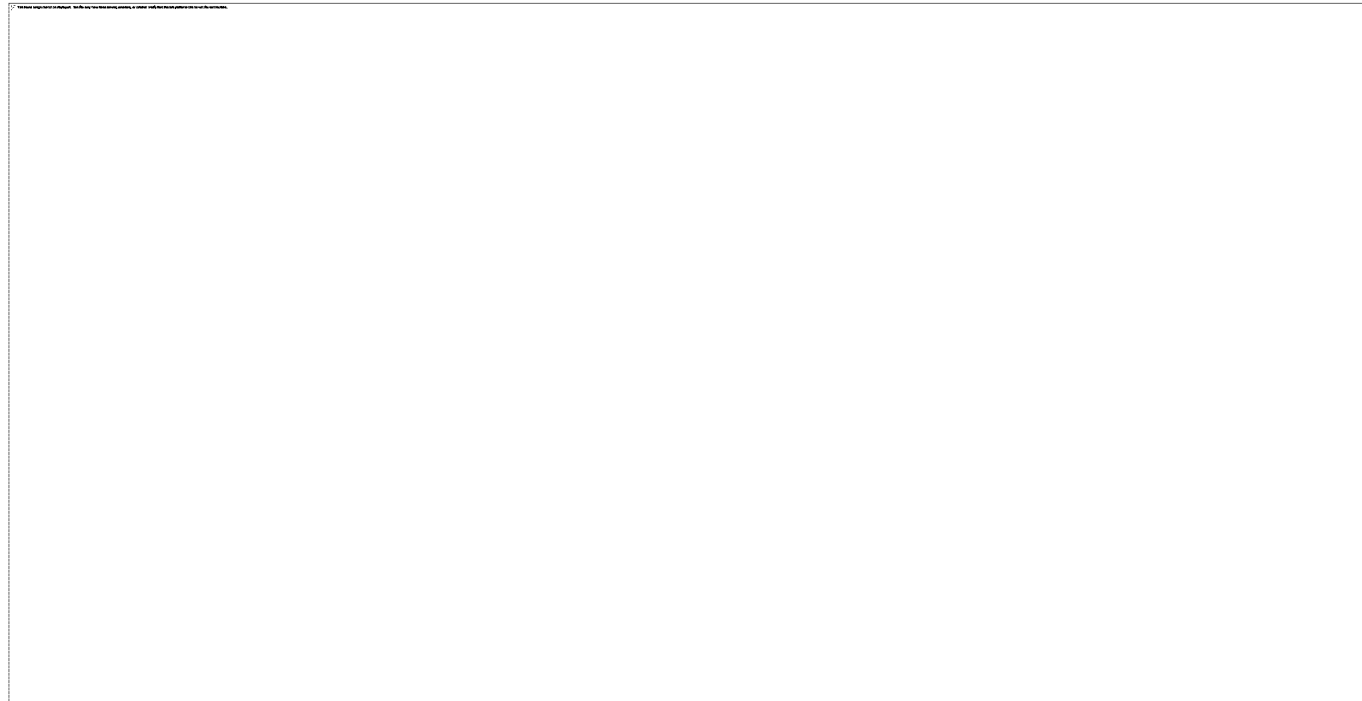
Rider ID: Risk-Based Document Scan Experiment

POC: Nengjun Zhao (nengjun.zhao@)

[Introduction](#) | [PRD](#) | [Experiment Plan](#) | [Pre-analysis](#)

Background: In LatAm, rider identification poses a significant cost to the new cash user funnel. It is responsible for a 25% drop-off on rides from “cash selection” to “ID verification pass”. The goal of this experiment is to understand whether verifying the riders deemed least risky, as determined by SDM and a combination of safety-risk features, can help us improve the DocScan 7-day SUFT without compromising the safety benefit of the product.

Product Design:



Plan:

- Continue to work with stakeholders to finalize product experience and experiment plan.

Rider Selfie

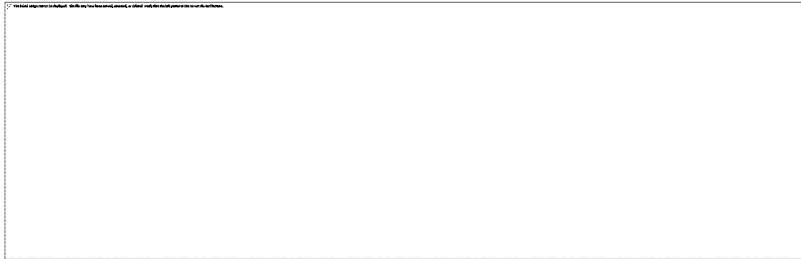
POC: Nengjun Zhao (nengjun.zhao@)

PRD | [Experiment Plan](#) | [Experiment monitoring sheet](#) | [Dashboard](#)

Background: Rider selfie is a new method to verify new riders sign-ups through a selfie photo using their phone's camera. Our objective is to build a verification that is difficult to spoof, has wide coverage, and is trusted by both drivers and riders. The experience will be part of the onboarding experience (skippable) and at trip request (mandatory) for new cash riders with no valid digital payment method on file. The flow will only allow selfies to be taken with the front-facing camera to reduce the probability that users will take a photo of someone else. Riders will not be able to upload a photo from their camera library.

Project Updates:

- EMEA: **Egypt and Ghana launched to 100%** (50% Control and 50% Treatment)
 - February Results:
 - Attempt rate: increased to 78.22%, 2pp higher than Jan.
 - Pass rate: 75.35%, 2pp higher than Jan; pass rate given attempt is 96.3%.
 - 14 day SUFT: 58.99%, 20.98% lower than non-verification group.
- LatAm: Paraguay, Peru, Ecuador, Bolivia, and Panama
 - February Results:



Plan:

- Launch Android version.

Mastermind Rule Review Process

POC: Nengjun Zhao (nengjun.zhao@)

PRD | [Experiment Plan](#) | [Rule list](#)

Background: As of January 2021, the Safety team has over 148 rules on Mastermind, most of which were created before 2018 and have not been reviewed since then. Rider behavior and marketplace conditions change often, but our MM rules are static. This means that our MM rules may no longer be effective, but they are still flagging riders and trips. Given that we have SDmv3 now, which we will be retrained often and takes into consideration past hotspots of crime, it is likely that a re-trained SDmv3 would more efficiently flag the risky requests that the current MM rules are flagging.

Project updates:

- Built a rule review plan:
 - Phase 1: Rules with 0 trigger in the last 3 months. Rules with two or more features update.
 - Phase 2: Rules that have more than 60% trigger overlap with other safety rules. Rules trigger less than 100 trips/day.
 - Phase 3: Rules that could be replaced by SDM model with smarter trigger.
 - Phase 4: Rules that trigger more than 2k trips/day
 - Phase 5: The rest of the rules
- Cloned all safety rules to safety_trip_request checkpoint, and added a master control group for all safety rules.

Plan:

- Review the rules following the plan.
- Build a Safety mastermind rule review protocol.
- Setup a recurring Mastermind rule review process for future monitoring including establishing key metrics

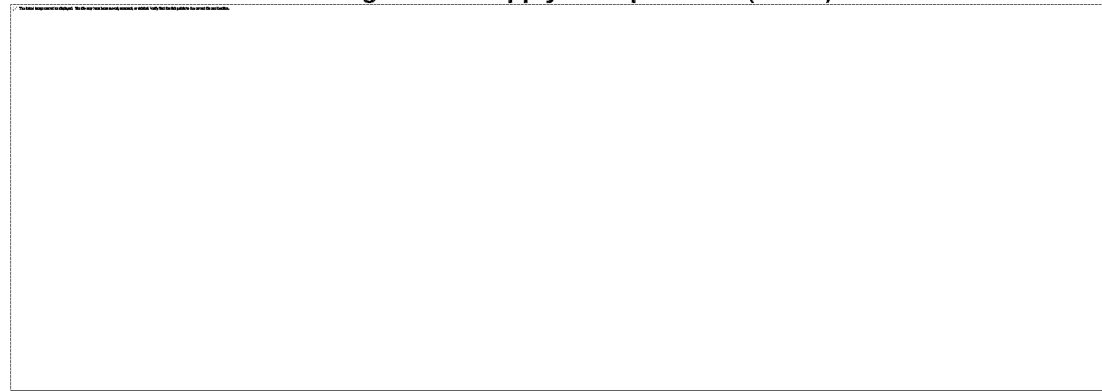
Women Rider Preference
POC: Zewei Liu (zewei.liu@)
[PRD](#) | [XP Plan](#) | [Dashboard](#)

Background: The Women Rider Preference (WRP) feature allows female drivers to take female riders only, was initially launched in Saudi Arabia during wave 1 last year. We are now expanding the feature to Brazil, Peru, Argentina, Paraguay, Mexico, Chile and Costa Rica. The key product design change in this expansion is using the settings page instead of a pop-up page to confirm and correct riders' gender information. We will track the overall impact to safety incidents, safety sentiment, and marketplace metrics in these new regions.

Project Updates:

- WRP has significantly reduced female driver's SA/SM and IPC incident rates.
 - Our method is comparing female driver trips with WRP on with female driver trips with WRP off.
 - Female driver's SA/SM incident rate has **reduced 78.9%**
 - Female driver's IPC incident rate has **reduced 51.6%**
- On the supply growth side, drivers who use the WRP more than half of their trips, their average supply hours per week have **increased 21.09%** since starting to use the preference, which is a much higher increase percentage compared with female drivers with zero or low usage.

Average driver supply hour per week (Brazil)



*For female drivers with 0% WRP usage, we use the average day when drivers started to use WRP to determine the before and after time periods. There are likely significant seasonal and COVID effects on markets in pre/post analysis. For the other two groups, pre/post is determined on a per-driver basis.

Plans:

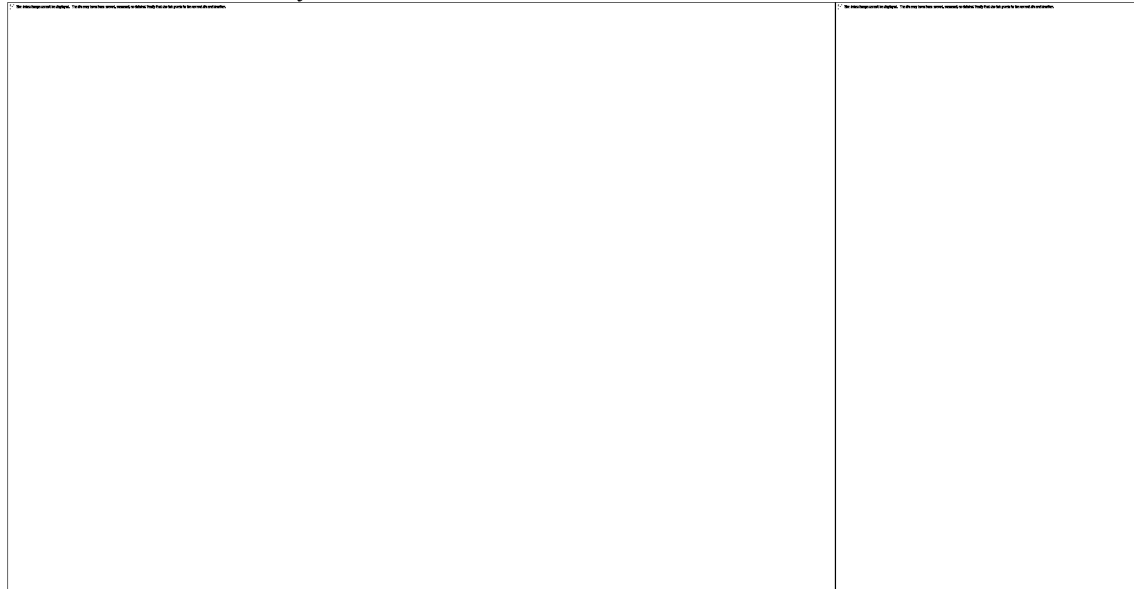
- Continue to monitor marketplace and safety impact in new launches.

Ultrasound Experiment
POC: Jianjin Wang (jianjin.wang@)

Background: In order to further reduce wrong vehicle/wrong driver incidents, and make the process more seamless (for example, when compared to the pin experience), the Uber AI team built an ultrasound method that enables signal matching between the rider and driver's phones without requiring users to take actions. The shadow test (i.e. no user-facing features) has been running for a few months and achieved stability of the ultrasound algorithm and integration. We will test ultrasound in production with UI.

Project Updates:

- To embed ultrasound UI to the current VYR experience, we will launch a new VYR UI to all US riders who opted-in to VYR.
- Pilot rollout to 20% of VYR riders in Illinois, Florida, Nevada, and Oregon on 2/24, rider A/B:
 - Treatment = new VYR UI + ultrasound visible
 - Control = new VYR UI + ultrasound only in shadow mode



Plans:

- 100% rollout to VYR riders in Illinois, Florida, Nevada, and Oregon on 3/1.
- Start to roll out the standalone new VYR UI (without ultrasound) to the rest of the US in March. Start to roll out ultrasound UI to the rest of US VYR riders in mid-March, contingent on success in the pilot rollout phase.

Marketplace and Response

RideCheck (Anomaly)

POC: Peter Photinos (p.p@) | Jheel (jheel@)

[Dashboard](#) | [Mid-way Drop-off Experiment Plan](#) | [Route Deviation Experiment Plan](#)

Background: At Uber, our goal is to ensure all trips end safely at the rider's intended destination. When trips do not turn out as intended, we want to make sure that our users know we are there for them. In this project, we'll work on extending RideCheck (Anomaly) to not only include long stop detection, but also mid-way drop-off and route deviation.

Project Updates:

- **Midway Stop detection:** now at 100% in LatAm.
- **Route Deviation Brazil XP:**
 - No stat sig change in serious IPC rate.
 - Preliminary survey results
 - **87% of drivers and 92% of riders think Route Deviation is a valuable addition.**
 - **52% of riders say they will use the Uber app more as a result of Route Deviation (45% no change).**
 - **47% of drivers say they will drive with Uber more as a result of Route Deviation (52% no change).**
- **Route Deviation Heuristic:** Initial analysis shows there is a correlation between the number of "reroute" mutations provided by the RoutePlanner service and rate of serious IPC incidents. Planning to add this feature into the existing heuristic to see if we can drive a significant improvement in precision through a reduction in trigger rate whilst keeping recall constant.

Safe Dispatch Model (SDM) v3

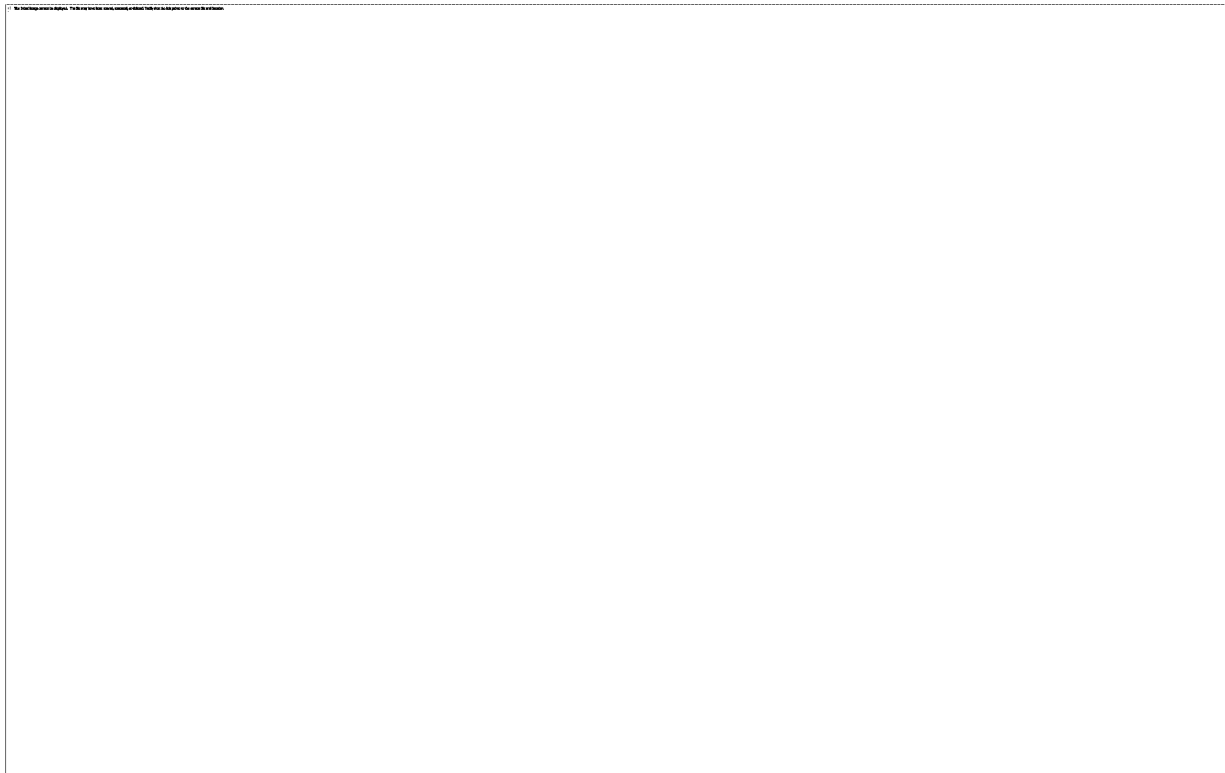
POC: Pedro Vianna (pedro.vianna@), Jianjin Wang (jianjin.wang@)

[Dashboard](#) | [Experiment Plan](#)

Background: SDMv3 assesses the risk of cash trip requests and potentially prevents the high-scored ones in the marketplace from becoming safety incidents. It is currently deployed 100% in Brazil and Mexico, 50-50 experimentation in Argentina and 10-90 experimentation in Chile. The latest model was trained in February 2020, and Risk developed improved versions of a few features, making a refresh after the significant events of last year a necessity.

Project Updates:

- **Updated Model launch:** deployment occurred successfully on Feb 25th, and expected gains in predictive power will be monitored and measured in the coming months via holdout groups for Brazil and Mexico (100% live), and via control groups for Argentina and Chile (still in experiment).



- **Non-Cash Model:** SDmv3 currently only acts on cash trip requests, but the model itself was trained on all trip requests, with a boolean feature specifying whether it was Cash or Non-Cash. Now that the newly-updated model was launched, we may extend it to non-cash trips and calculate the global performance metrics, i.e. combining Recall and Trigger Rate to increase transparency to Ops stakeholders.

Plans:

- Monitor recently launched model to ensure stability
- Kickstart SDmv3 expansion to non-cash trip requests
- Train SDmv3 without Country ID flag to test generalization to new countries

Safety Media

Audio Recording

POC: Eiva Shen (elvas@)

[PRD](#) | [Funnel Dashboard](#) | [Usage Dashboard](#)

Context: This feature will give riders and drivers the ability to start recording audio through their mobile devices while on-trip. Users will have the ability to submit audio recordings to Uber which could potentially help in the investigation of safety incident reports. After rollout 100% in Brazil and Mexico, we continue expanding the feature in LatAm and other regions. Meanwhile, we are actively experimenting with some add-on features.

Project Updates:

- LatAm: Launched one-party in Honduras on Feb.22.
- **Add-on features:**
 - **Rider Queue Recording:** To reduce non-safety voice memos, we launched the audio feature which allows queueing up recordings until drivers arrive. We are investigating the audio ticket content and validating mobile event funnels to provide metric readout.
 - **Driver Periodic Check-in:** To protect driver privacy, we will be sending drivers a pop-up message when detecting a continuous recording. It has rolled out in Brazil and Mexico on Feb.14 and so far the results show 80%+ drivers intend to keep recording between trips.
 - Audio Ticket Hashtag Analysis for Spanish Speaking Country (SSL) (10k+ audio tickets with hashtags from 2019/12 - 2021/01):
 - Given the 6 pre-defined hashtags (#AUDIOMISSING, #SPAM, #VOICEMEMO, #NOTRELEVANT, #RELEVANT, #ESCALATED), we breakdown ticket types by driver/rider, safety/non-safety:
 - Driver tickets: Safety tickets accounts for 23% of total tickets (6.7k) with 45% categorized as #RELEVANT.
 - Rider tickets: Safety tickets accounts for 15% of total tickets (3.5k) with 31% categorized as #RELEVANT. 45% of non-safety rider tickets are #VOICEMEMO, which we tried to reduce these ticket types with the Rider Queue Recording feature.
 - #RELEVANT tickets that are safety issues:
 - Drivers: Top ticket types are missing face covering, then IPC, both verbal altercation and physical altercation.
 - Riders: Top tickets mostly for missing face covering then dangerous driving and verbal altercation.

Next steps:

- Prepare one-party pilot 2 rollout in Pakistan and India.
- Send target cohorts surveys to understand safety sentiment impacts in El Salvador where we launched Blanket Consent, the strictest version of audio recording feature.
- Prepare rollout for the next set of Blanket Consent countries.

Dashcam

POC: Jheel Doshi (jheel@), Ponon Shyu (ponon@)

[PRD](#) | [Dashboard](#) | [Access](#)

Context: The dashcam pilot project with Nauto has been live since 2019. The dashcam team is also in the process of adding more vendors like CMT. In addition, there is an effort underway to build a platform that allows drivers to register their existing dashcams with Uber while allowing for integrations with dashcam vendors to facilitate alerting riders to recording and sharing video with Uber. This would be a mobile experience starting with drivers being sent carbon inboxes and emails to trigger the deep link flow. Drivers will also be able to navigate to the feature via settings.

Project Updates:

- We launched the BYOD video upload in 3 cities (Philadelphia, Seattle, Denver) and we have set up a monitoring dashboard. Once we can confirm the experience works as expected we will increase the rollout.
- We are still working on refining our dashboard, but so far we have had drivers on 12 trips initiate a video upload. One of those went through the Accident Workflow V2 and the rest through dashcam workflow which includes support for issues such as My rider made me feel unsafe.
 - Of those 12 trips, most didn't have the footage but 2 drivers were successfully in uploading video.
 - We also have metrics on failures occurring during upload which allows us to easily diagnose drop-offs in the funnel.



- In Brazil, we started a software-only solution with Grip Mobility ([RFC](#)). The pilot is ramping up slowly (expecting 1k invites by the end of February), but will ramp up faster once we have confidence in the process.
- The original 2019 Nauto pilot has officially ended. Uber is sending communications to pilot drivers informing them of the end of the test and asking them to un-install their Nauto dashcams.

Next steps:

- Set up insurance shares & file characteristics of the video upload & refine the metrics more by collaborating with eng
- Re-refresh [previous Nauto analysis](#) with all data since April 2020 (ie post-COVID) to close out Nauto pilot
- Look into the ROI of Dashcams that have telematics functionality

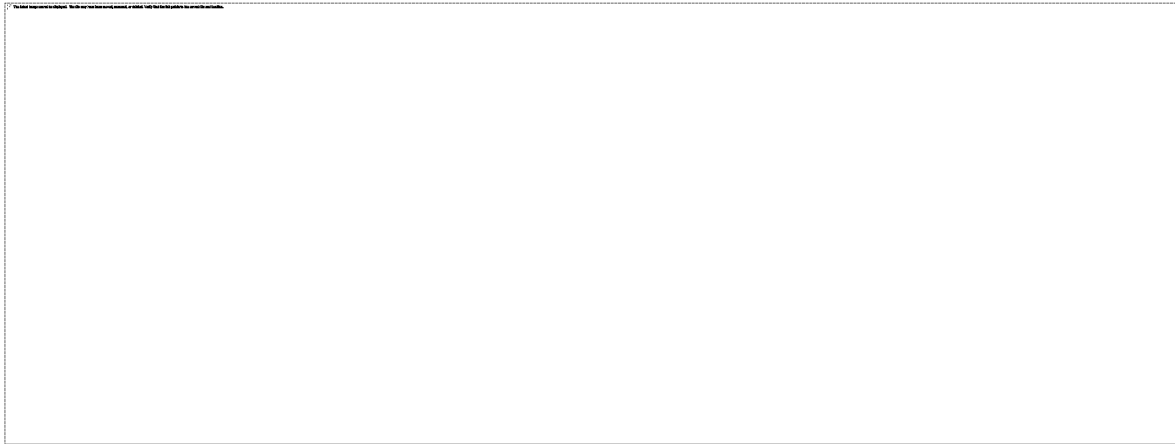
Safety Operations

DACT 3.0: Machine Learning Framework for DACT

POC: Zewei Liu (@zewei.liu)

[Overview](#)

Background: When we first launched DACT (1.0) years ago, all policies were incident count rules. Then, to create a more dynamic framework to account for different tenure of users, we developed a credibility weighted model (DACT 2.0) which is what is currently in production. Finally, in order to incorporate more signals for DACT policy, we are working to explore the next version of DACT which will be leveraging a machine learning approach.



Project Updates:

- Our initial version of the ML model of the dangerous driving policy for US & Canada shows a **30% increase** in lift in all tickets and **57% decrease** in driver flags compared with the current credibility weighted Model.
- Presented ML approach to Legal.

Plan:

- Work with engineers and product managers to put an ML version of our dangerous driving policy in shadow mode to evaluate performance
- Design A/B testing framework to test the effectiveness of ML model.
- Expand feature variables to incorporate more signals in dangerous driving models.
- Expand ML framework to IPC policies.

uSights

POC: Jake Atlas (@jakeatlas)

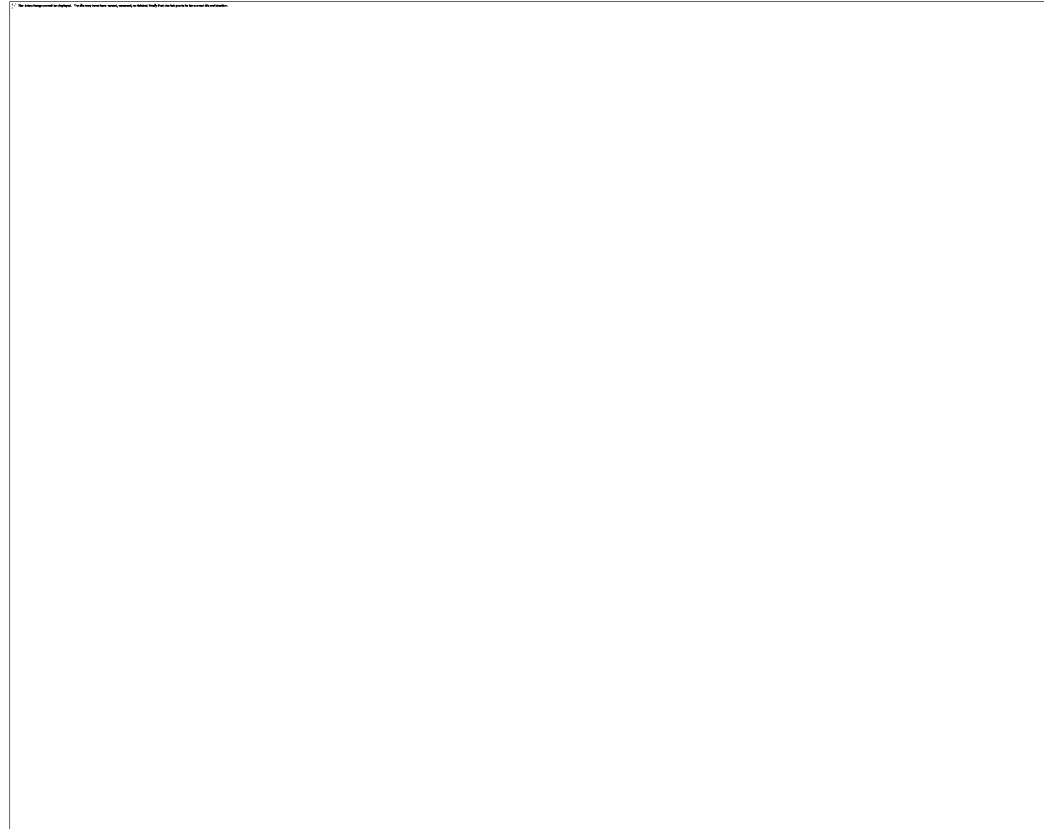
Background: uSights is Uber's in-house psychometric test to help provide screening insights for new driver-partner applicants where high quality background check data is not readily available. Given the success of uSights in Mexico on incident rates, we have decided to, in partnership with local teams, design and launch new uSights tests in other major regions including Brazil and India.

Project Updates:

- **Eats Expansion:** Determined to wait on pursuing Eats expansion due to business needs relating to courier supply shortage and relatively low incident rates
- **India Expansion:** Concurrent study phase I is 67% complete.
- **EMEA Legal:** REDACTED - PRIVILEGED in line with requests from EMEA legal. REDACTED - PRIVILEGED
- **LatAm Education:** Finalizing content reviews with local teams for anticipated launch in the next month
- **Brazil Launch Monitoring:** Conversion rate is steady following uSights the Jan 21 uSights launch in Brazil (3 small cities). Failure rate (0.7% actual) is in line with the target failure rate (0.5%)

Planned:

- Brazil: Continue to monitor the new test's impact on the onboarding process and its effectiveness, with plans to expand further to larger cities after the end of the month
- India: Continue to collect data for concurrent study phase I, accelerated by transferring some drivers targeted for phase II to phase I
- REDACTED - PRIVILEGED Follow legal guidance: REDACTED - PRIVILEGED
- Eats: Monitor the drivers who take uSights but ultimately also choose to act as couriers, which provides a lens into the efficacy of uSights for Eats
- Infrastructure: Expand pipeline to be robust enough to integrate with Michelangelo machine learning models. See below for a case study on the benefits of model revamp (Linear to XGBoost) using the Brazil concurrent study phase II in which we saw a bump in performance for DD incident rates.



Road Safety / Insurance

Driver Crash Report Funnel Analysis & Visualization
POC: Olivia (@olivia.wang)
Funnel Visualization & Opportunity Sizing

Background: It's an ongoing focus to enhance and optimize the Driver Crash Report to continue to reduce the time from the claimant's report to Uber to first successful contact with the claimant, especially for the third party. We did a deep-dive on the funnel progression across various cohorts in order to generate insights on opportunities to continue improving user experience. We are also working on bringing the funnel visualization to Mixpanel platform, which will enable self-service experience for partners and quick notification on trend change and funnel drop-offs.

Project Updates:

- Designed confident/fuzzy linkage between crash report screen activities and crash claims.
- Deep dived on various cohorts (e.g. platform, entry point, driver flow, trip flow, trip period, crash status)
- Identified three types of opportunities
 - Bring Awareness: for drivers who encountered auto crash but did not use driver crash report at all
 - Optimize Funnel: for drivers who encountered an auto crash and initiated driver crash report, but did not finish. A reminders experience could help improve funnel here.
 - Propose for interim report saving feature: We noticed it takes drivers 1.68 attempts to finish and submit the report. Today, if the driver is disrupted during a report session, when he/she comes back, he/she needs to start all over again.
- Did trend analysis to explain the recent drop in funnel completion rate

Plan:

- Partner with GSS team to onboard the data and then develop funnel visualization on Mixpanel

Regulatory Reporting / Legal Data Requests

TFL London Annual Report

POC: Todd Gaddis (todd.gaddis@) | Scott Vogel (svogel@)

[Safety Product Metric List](#) | [Safety Narrative](#)

Background: With our new license granted by the TFL, our TFL Assurance Report has moved to a semi-annual basis (Aug 2020 - Jan 2021). We have moved from using Linklaters as our Assurance Provider to Deloitte. Deloitte will be responsible for reviewing our processes and logic related to Safety Product and Serious Incident Metrics.

Project Updates:

- TFL Report and Narrative has been completed, final board approval is underway and expected to be sent at the end of the month.
- The final numbers for Serious Incidents have been pulled and shared with Deloitte.
- Worked with Deloitte on reviewing methodologies for metrics under assurance review.

Regulatory Data Requests

POC: Todd Gaddis (todd.gaddis@) | Scott Vogel (svogel@)

Project Updates:

Market(s)	Type	Cadence	Status
Portland	Collisions & Serious IPC	Monthly	Completed

Maryland	Serious Incidents & Deactivations	Annual	Completed
Toronto	Collisions	Annual	Completed
London	TFL Assurance Report - Product Metrics and Serious Safety	Semi-Annual	Completed
Mexico City	Blanket Report	Quarterly	In Progress

Additional Context:

- **Toronto** - The report format was historically completed but not sent in 2020. The Ops team was having further conversations with regulatory entities on both the format and cadence of the report. The decision was then made in 2021 to send an annual report of collisions data to Toronto for 2020.
- **Maryland** - The report historically utilized the reported_against column, but is in the process of being deprecated. Conversations were had with Legal

REDACTED - PRIVILEGED

- **Annual CPUC Report:** Working with Legal and Privacy, REDACTED - PRIVILEGED

Legal and Claim Data Requests

POC: Todd Gaddis (todd.gaddis@) | Scott Vogel (svogel@)

Project Updates:

REDACTED - PRIVILEGED

Safety Data and Infrastructure

Deactivation Data Model and Data Sharing

POC: Todd Gaddis (todd.gaddis@)

[Data Model PRD](#) | [Databook](#) | [Careem Playbook](#) | [CornerShop Playbook](#)

Background: The current process of identifying deactivation reasons is very cumbersome and often determined from varying free text inputs and multiple sources. This creates difficulties in reporting across different time periods, as well as for regulatory purposes. In this cross-functional project, we'll be working with the Safety Product team to create a scalable solution to centralize deactivation data.

Project Updates:

- Careem
 - Working with Safety Ops to provide Document Expiration information for specific Doc types for matched drivers to reduce transcription work that may take upwards of 3 months to do manually. Initial results are promising and undergoing further review with the Compliance team.
- Cornershop
 - Updated existing logic to allow for partner matching in Mexico and Costa Rica

Safety Incident KPI Dashboard Enhancements
POC: Alessandro Araujo (alessandro.arajo@)

Background: We have been partnering with the Incident Analytics team to further enhance the Safety Incident KPI Dashboard. The recent focus has been to allow better ability to slice incident rates including the ability to view metrics based on company-wide view vs regional views along with cutting by Eats and Rides.

Project Updates: We completed enhancements to the dashboards including two new tabs which are now in production and we will continue to work with the Incident Analytics team to add new features to make the KPI dashboard even more insightful for regional stakeholders. Below is a summary of the new tabs:

- **Overview:** Summarized view to analyze and compare the incident rate of each incident type
 - **It is possible to switch between company wide metrics (critical sexual assault, motor fatality, physical assault fatality) and regional operational metrics (all auto crash, and serious incidents)**
 - **Mega region or global views**
 - **Eats and Rides views**
- **Regional Breakdown:** To analyze and compare the incident count and rate of two different years of each mega region
 - **It is possible to switch between Company Wide and Regional Operational metrics**
 - **Drill down to have sub-region level**
 - **Eats and Rides views**

Plan:

- Create personalized permission access to APAC, EMEA, Latam and USA & Canada teams

Thanks for reading. Feel free to reach out if you have any questions.

- Sunny

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