



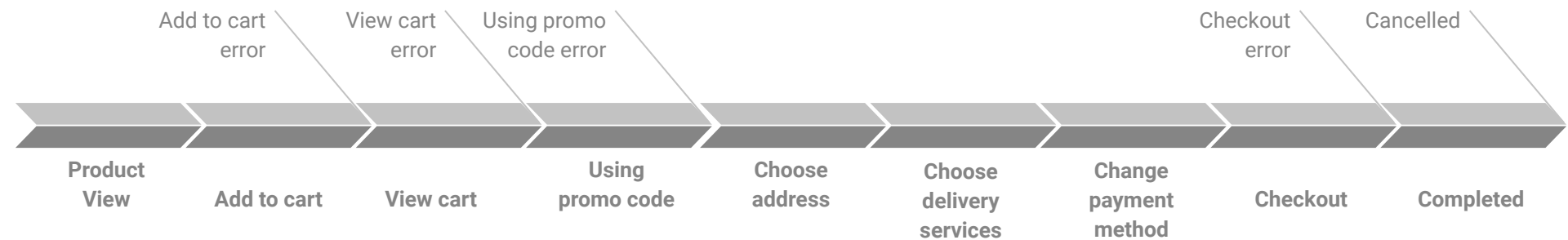
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# ECOMMERCEU

## Feature Roll-out Adoption Analysis

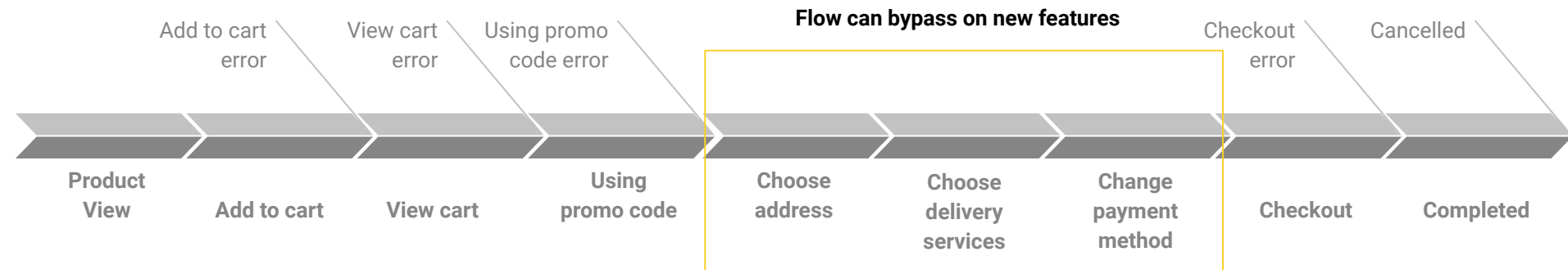
Revou Labs May 2022 Division 2 - Team 4

# App Flow



Process flow focus on major path (happy path). While error event or cancelled are categorized as unhappy path which is not the focus of flow, but need to see the effect

# New Feature Implementation

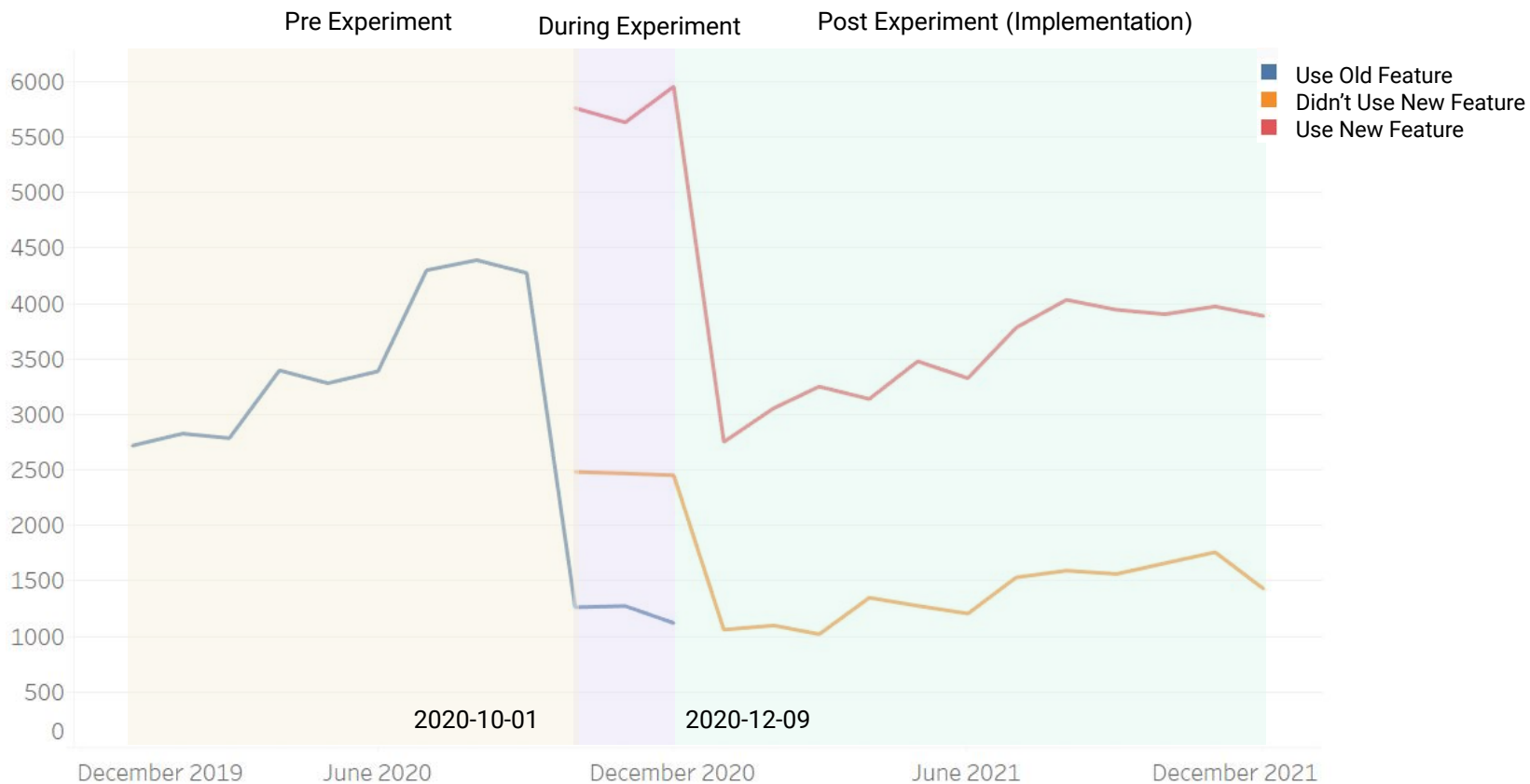


Implementation of new features on Q4 2020, where user can bypass filing address, delivery services & payment method

# Timeline



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# Evaluate New Features

Measuring the impact of implementing new features, by conversion rate & duration time metrics

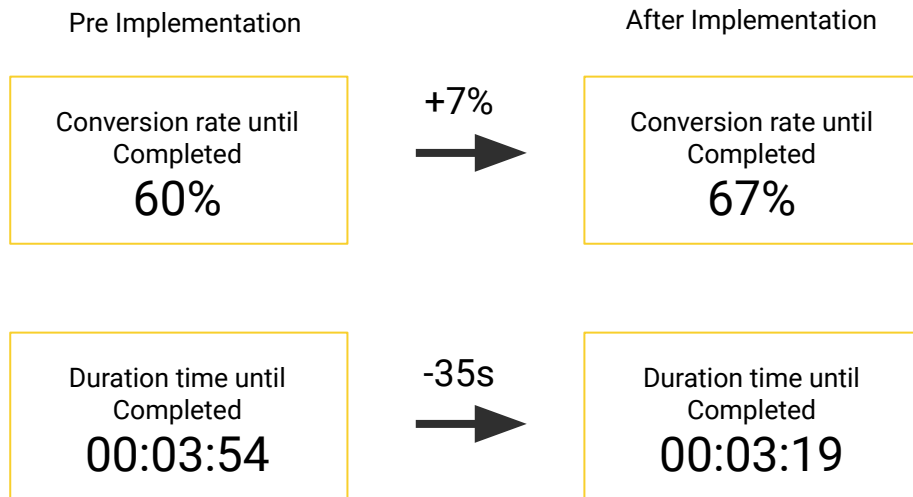
- **Conversion rate**

Should be used to evaluate new features effectiveness, because it will relate to customer acquisition costs, by increase conversion rate we can lower acquisition costs, increase transaction, and also revenue.

- **Duration time (time to purchase)**

For this new feature users can bypass some events, so if implementation of new feature are impactful then the duration are shorter.

# New Feature Impact

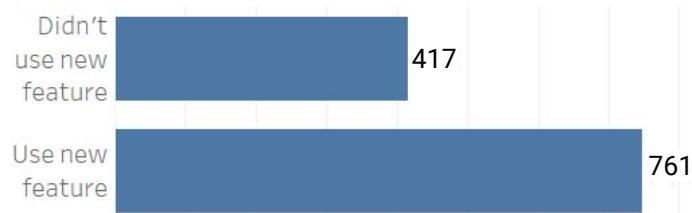


Implementation new features increase 7% conversion rate of people who completed transaction. And decrease 35 second duration time to make a transaction. This can be indicator that new feature give positive impact, more completed transaction and more time efficient app transaction and less latency in app

# Evaluate Pre & After Implementation Conversion rate

	Use Old Features	Use New Features
Product View	719 100%	761 100%
Add to cart	660 92%	702 92%
View cart	648 90%	673 88%
Using promo code	600 83%	637 84%
Choose address	522 73%	625 82%
Choose delivery services	509 71%	605 80%
Change payment method	499 69%	588 77%
Checkout	449 62%	556 73%
Completed	431 60%	510 67%

## After Implementation



Overall conversion rate after implementation of user who use new feature are higher than pre implementation, but lower at **view cart** event. Even though **completed** rate of use new feature are higher, but the decrease from previous event are bigger (6%)

# Pre & After Implementation Conversion rate (Unhappy Path)



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	Use Old Features	Use New Features
Add to cart error	22 3,06%	9 1,18%
View cart error	13 1,81%	4 0,53%
Using promo code error	33 4,59%	12 1,58%
Checkout error	9 1,25%	14 1,84%
Cancelled	51 7,09%	69 9,07%

Conversion decrease in view cart caused by unhappy experienced from the previous event.

But from unhappy path, conversion rate at “**add to cart error**” event for “use new feature” are less than “use old feature”, so this is not the problem.

Big conversion gap of **completed** from checkout high caused by higher rate of **checkout error**

Conversion rate of **cancelled** for “use new feature” are higher than “use old feature”, this can be caused from accidentally checkout, because of the convenience of a new feature that can bypass events.



# During Experiment



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	Use New Features	Didn't Use New Features	Use Old Features
Product View	913 100%	604 100%	439 100%
Add to cart	869 93%	562 93%	357 81%
View cart	836 90%	529 88%	369 84%
Using promo code	787 85%	508 84%	328 75%
Choose address	777 83%	480 79%	296 67%
Choose delivery services	754 81%	449 79%	289 66%
Change payment method	737 79%	418 69%	283 64%
Checkout	705 76%	403 67%	255 58%
Completed	648 70%	352 58%	243 55%

From the experiment point of view, use new feature user behaviour for “**view cart**” event are different from post experiment behaviour, they have higher conversion rate than user who didn't use new feature and user who use old feature.

The behaviour change, after implemented new feature, users tend to window shopping instead of “view cart”, and barely revisit cart.

# Duration time (pre vs post)



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Group	Event name	Time difference	Group	Event name	Time difference
Still use old feature	Add to cart	00:00:45.3	Use new feature	Add to cart	00:00:44.9
	View cart	00:00:23.4		View cart	00:00:22.4
	Using promo code	00:00:33.6		Using promo code	00:00:34.1
	Choose address	00:00:37.2		Choose address	00:00:14.9
	Choose delivery services	00:00:16.7		Choose delivery services	00:00:09.8
	Change payment method	00:00:16.9		Change payment method	00:00:09.9
	Checkout	00:00:06.5		Checkout	00:00:06.5
	Completed	00:00:08.3		Completed	00:00:08.3

We can see there is a quite significance reducement of time usage in workflow of Choose address, Choose delivery services & change payment method for the users who already used the new features. But there's increase duration time in using promo code after implementation new users.

# Analysis & Recommendation



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- **Decrease high cancellation rate**

Add new event before checkout, “agreement event” or “are you sure to checkout?” so it will minimized accidentally checkout, and decrease cancellation rate. ( considering that cancellation rate is also important metrics for ecommerce apps)

- **Reduce checkout error**

Recommendation for product team to improve app performance and minimize bug to decrease error in checkout event.

- **Make user to revisit cart**

Create cart reminder “don’t forget to checkout”, so user will revisit cart they’ve abandoned, to convert into transactions.

- **Reduce total duration time**, from the event that has potential to be reduced

Especially for using promo code, after implementation duration time are increase become > 34 second to use promo code. This can be minimized by provide “promo code recommendation”, so users don’t think twice in choosing promo code, and finally reduce app duration

Google colab link:

<https://colab.research.google.com/drive/1JYWhu8o9I9uudRrbZIEy89us4Hg2-eYo?usp=sharing>

[https://colab.research.google.com/drive/14IarDGif9BXtUNL0I\\_GtZrkwyKI8hl6j?usp=sharing](https://colab.research.google.com/drive/14IarDGif9BXtUNL0I_GtZrkwyKI8hl6j?usp=sharing)