

## Part I

Thanks to our data analyst, we've been given product, customer, and review data from the last few years. After some exploratory analysis (Python notebook), we've made several conclusions about issues that have arisen. There are challenges the team has the potential to overcome using various tools and resources at our disposal.

### Analysis:

1. Order reviews paint a rather bleak picture of customers' experiences. Over 20% of orders have a rating of 1 star (on a scale of 1 to 5). Of the negative 1 star ratings, most associated reviews have to do with poor product quality, receiving an item late, or never getting it at all.
2. Many orders are missing user reviews. This is a problem since we are missing out on valuable customer feedback. Let's try to find a way to reduce or eliminate this number through incentives.
3. Over 80% of orders only contain one item. Surely we can figure out a way to increase this number to boost revenue.
4. Revenue growth has stalled significantly in 2018 compared to the year before.
5. Less than 7% of users purchased items more than one time. This is a poor retention rate that needs to be corrected as soon as possible in order for the business to grow.

Of the three options the team has come up with, I believe the best approach is to consider the first. Phasing out the online store-building tool and listing vendor's products in one integrated online store run by OList would be a fantastic approach for several reasons. First, phasing out the online store-building tool would likely alleviate a lot of time and energy constraints for the entire team, especially the engineering team. The need to constantly roll out tailored site features and designs for various clients in diverse industries can be draining. By having one site, the team can focus on one platform and spend all time and energy on a single site.

Second, placing all products on one platform introduces the concept of market efficiency. Analysis shows most negative reviews stem from late shipment of items, not receiving items at all, or poor quality of the product. The idea is that sellers who are lacking in quality of products or poor supply chain services with respect to competitors will be naturally phased out, leaving only competent sellers and their products. Another scenario is that these poorly-rated sellers will have to step up their game to be able to match the power sellers, creating better products and shipping services, thereby constructing healthy market competition. The market would benefit with buyers and

sellers expecting a higher quality shopping experience, resulting in more business. Rates of positive reviews are likely to climb up as time goes on. Given that our customers have a less than 7% chance of returning to purchase from our sellers, I see the aforementioned strategy resulting in higher rates of customers returning. As we know, it is more expensive to acquire new customers (both buyers and sellers) than it is to retain current ones.

Third, given that more than 80% of orders only consist of one item, I believe that converting to a massive online store gives customers access to all kinds of products on one platform for large, diverse orders rather than going to individual sites and creating multiple orders. It's the same principle as to why shoppers at Target or Amazon are more likely to impulse purchase when originally going in for only one product. You come in for a new toothbrush and all of a sudden you're walking out of the door with a 65 inch TV, a soccer ball, and a birthday card for your brother-in-law. The large scale platform opens up another window of possibilities in terms of creating recommendation systems that utilize a combination of collaborative filtering and content-based filtering. Over time, shoppers would receive smarter and better tailored product recommendations each time they come to the site. For the conversion to a massive online store, I would recommend that the individual sites get phased out slowly, perhaps maintaining them a few months after the large site has launched. This is in order to allow buyers and sellers to be made aware of such a large change and give them time to make the transition.

Furthermore, I believe that customer segmentation for purposes of increased retention can help our business. The way that I see this happening is by splitting users into various groups based on assessed risk of future churn. For sake of argument, let's say we split users into three groups, the first being high risk of churn, the second being in the middle, and the third having low risk. Each group would be targeted with various strategies but some actions would be given to all three. One approach that would be given to all is to reach out by means of surveys to assess past purchase experiences. This would allow us to gain user feedback from those who did not leave reviews by their own means and extra feedback from those who did. Where it begins to differ is creating various subgroups within each of the three risk groups and designing small treatment groups to compare how their retention as well as customer lifetime value adjusts with contrasting promotional strategies. For these reasons I believe that switching to a massive online store would increase revenue and positive reviews, decrease churn, and build our brand.

SINGLE MARKET SITE LAUNCH				
DEPARTMENT		MONTH 1	MONTH 2	MONTH 3
	WEB PLATFORM	<div>Front/Back End Design</div> <div>UI/UX Design</div> <div>Browser Optimization</div> <div>Establish Development Environment</div> <div>Database Integration</div>	<div>Build Web App MVP</div> <div>Testing &amp; QA</div> <div>Maintain Old Seller Sites For Phase Out</div>	<div>Testing &amp; QA</div> <div>Possible API Integrations</div>
	MOBILE PLATFORM	<div>Front/Back End Design</div> <div>UI/UX Design</div> <div>Optimize For Each Operating System</div> <div>Optimize For Specific Hardware Devices</div>	<div>Build Android App MVP (87% Of Users In Brazil)</div> <div>Testing &amp; QA</div> <div>Maintain Old Seller Sites For Phase Out</div>	<div>Build iOS App MVP (13% Of Users In Brazil)</div> <div>Testing &amp; QA</div>
	SALES & MARKETING	<div>Awareness Campaign</div> <div>Train Sales &amp; Marketing Team</div> <div>Create About, Mission, Product Pages</div>	<div>Demand Generation Campaigns</div> <div>Create Early KPIs Measures</div> <div>Prepare Support Tools For Sellers</div>	<div>Evaluate Target Goals</div> <div>Evaluate Future Churn Analysis Strategy</div> <div>Prepare Customer Surveys</div>
	PRODUCT/DESIGN	<div>Metrics To Measure</div> <div>Design Validation</div> <div>MVP Definition</div> <div>Design App Feedback Channel</div>		

## Part II

I'm gonna take a bit of a risk on this one and take a left-field strategy.

So the engineering team has determined that a db cluster has unfortunately lost data due to a misapplied migration. We've lost all address data for orders placed in the last 96 hours. The team claims the data can be reconstructed in a matter of 3-5 days. This risks the customer experience for both buyers and sellers as their current orders will be delayed by several days. Customer retention rate is largely one of the most important KPIs to determine the health of a business, and Olist has a rather dismal one. It would be distressing to simply email an apology to buyers and/or sellers as confidence in our business would only go lower. There is no upside. Instead, Olist could use an approach that utilizes the psychology behind consumerism to our advantage. I suggest we market a sort of "Prime Day" as Amazon does within the week for all of our customers. Sellers lower their prices for this day and offer incentives such as free shipping (which Olist can help with financially from earlier strategy talks). Furthermore, we allocate resources for assisting sellers in advertising this "Prime Day" so that Brazilians get excited about the prospect of buying everything on their wish lists at a discounted rate. The motivation behind this is threefold.

First, the thought may come across to buyers that with such an exciting and massive sales event, previous orders being slightly backed up is simply inevitable and with all the money they've saved, they wouldn't mind as much that any previous orders are a little late. Maybe it's even perceived that all the items are being packaged and shipped together since orders were made so close to each other. Second, customers would perhaps anticipate these items more than any orders made from the last 96 hours. We can immediately ship out these prime day items since orders can still be made in the meantime and will not be impeded by the db cluster's failure with previous orders. Third, establishing "prime day" can build our brand due to the viral nature of massive sales events and begin to interest new customers just as we are building our MVP for the massive online site.

An obvious pitfall to this strategy is that there will inevitably be buyers that do not participate in this prime day, or fume over late shipment of their original orders anyway. However, I believe this plan mitigates the fallout and actively creates some positive opportunities rather than it being purely negative. By providing free and/or discounted shipping, lower/no sale fees etc., sellers can be confident that Olist truly cares for their business and wants to help foster growth by supporting their brand with the prime day event.