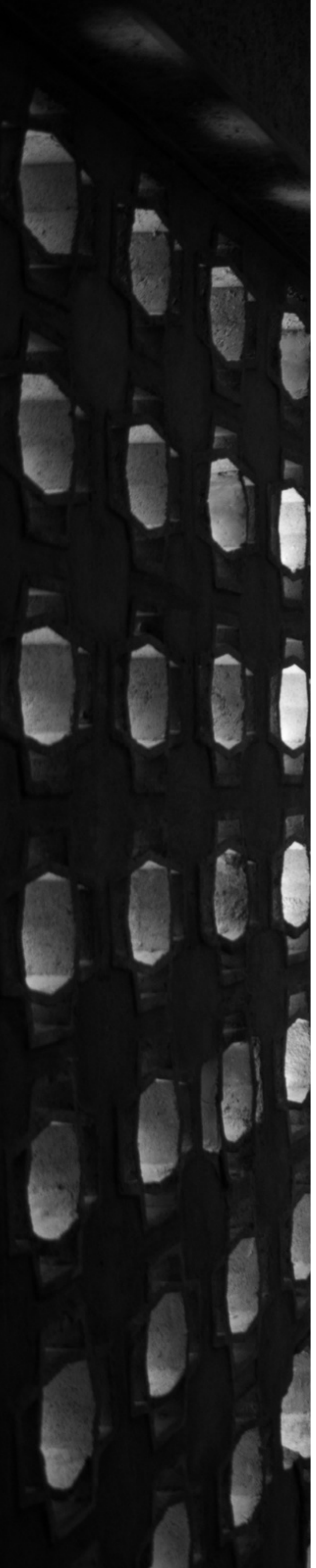
TKS x instacart

RE-ALIGNING METRICS.

IMPROVING CUSTOMER EXPERIENCE BY ENHANCING SHOPPER EXPERIENCE.



RECOMMENDATION SUMMARY.

PROBLEM - STRESS.

Metrics used to track shoppers result in systemic stress, and increased workplace stress leads to lower performance. In fact, 16% of customers have critical shopper issues - driven by speed-centered metrics.

THIS RESULTS IN:

#1 Increased shopper competition.
#2 Higher worker turnover.
#3 Lower food + delivery quality.
#4 Increased customer dissatisfaction.

SOLUTION - GAMIFICATION.

Our solution implements new metrics to track shopper performance with objectives and points - reducing stress and promoting healthier competition.

4 PHASES:

#1 Integrate specific target objectives.
#2 Implement a point-based metric system.
#3 Implement perks per threshold.
#4 Split test new metric system.

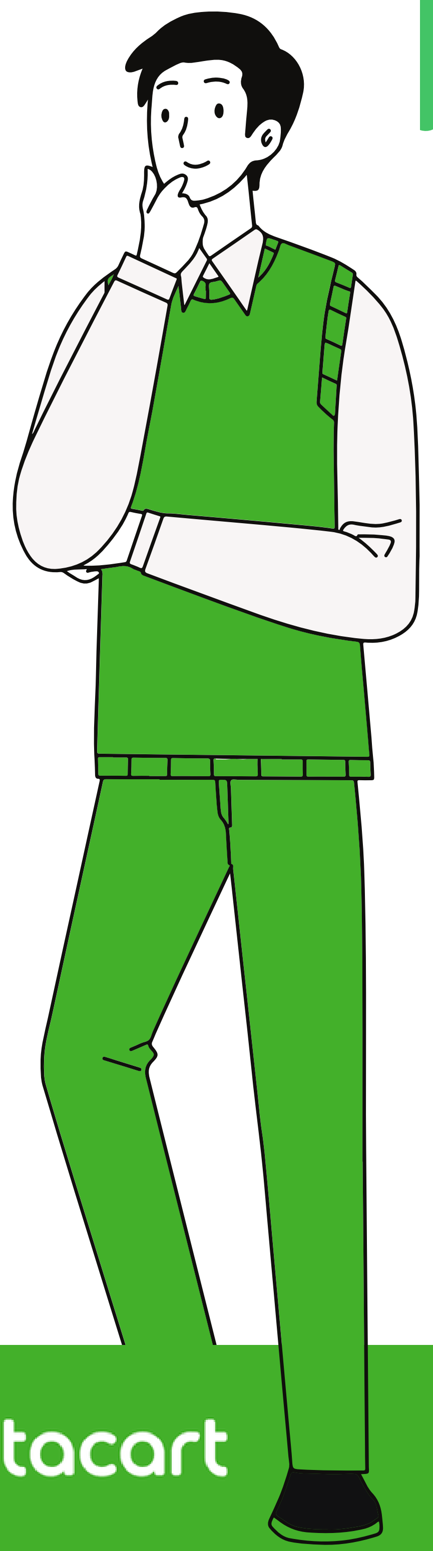
IMPACT - SATISFACTION.

This simple approach addresses the root, systemic causes of the customer service problem. In fact, 89% of employees believe they would be more efficient with gamification.

BENEFITS:

#1 Lower error and mistake rate.
#2 Improved customer satisfaction.
#3 Greater shopper happiness.
#4 Better reputation and acquisition

The main cause of customer dissatisfaction is **shopper-related mistakes** - we can fix this.



What can we do to improve Instacart's customer satisfaction rates?

THE PROBLEM.

AN ILLUSTRATIVE REVIEW.

Around 51% of thousands of 1-star customer reviews belittle customer service, and 16% concern shoppers.

Here, the shopper either a) forgets a part of the order, or b) is careless with the ordered products.

These are two textbook symptoms of stress.*

Attempting to optimize for efficiency is sacrificing good, or even adequate, customer service. **Multiple testimonies, reviews, interviews, and articles indicate that this is primarily a shopper issue.**

Seconds per item are one of only metrics shoppers have to indicate progress, leading shoppers to optimize for just that. In this case, this **permanently lost the buisness of a customer.**

> “*I received crushed bread loaves...frozen fruit, only one box of two cereals, and a missing gallon of orange juice... The shopper did not ring the doorbell as requested thus leaving milk, eggs, and cheese out in the sun.... **I'll never use Instacart again.***”

*Source

SHOPPER STRESS.

The core problem.

> **"You're like spinning plates, riding a unicycle. You have to go as fast as possible, and you have to be a perfect customer service agent. "**
>
> JONATHAN MCNELIS - INSTACART SHOPPER

16% of Instacart's shoppers are unhappy with the company + stress levels.*

THE **METRIC** PROBLEM.

The pandemic has resulted in a 500% boom for Instacart. Due to this, **excessive emphasis has been placed on increasing employee efficiency -** in the form of metrics (like seconds per item and incidents). Shoppers feel that this is stressing them out - "You can feel time ticking down as you're shopping."**

THE **QUALITY** PROBLEM.

These metrics are intended to increase efficiency - yet they make shoppers feel exceptionally strained and overwhelmed. **Stress has been found to hamper employee performance** - a major problem for a service-centered company like Instacart.

THE **SERVICE** PROBLEM.

These metrics place a focus on speed, unintentionally sacrificing quality of service. In fact, shoppers have a harder time giving quality service to customers **without their metrics taking a hit.** Coupled with stress, shoppers are, ironically, disincentivized from providing quality service.

*Source, **Source

THE REWARD CYCLE.

A closer look at what's happening.

#1 TRIGGER.

A cue and craving in the anticipation of a reward – the trigger for shoppers is receiving a new batch and accepting it.

#2 ACTION.

The easiest possible path to achieve the reward – for shoppers, this is the act of shopping and delivering items.

#3 INVESTMENT.

The effort required to obtain the reward, an extension of action – shoppers invest more time and energy to ensure fast deliveries.

#4 REWARD.

The end reward is obtained. This isn't included in the metric system – despite rewards being more effective than punishments.*

#5 REPETITION.

The culminative reward determines if the action is repeated – the reward becomes the new trigger.

⚠ Shoppers aren't being motivated by rewards – their actions and investments avoid punishments. **Repetition of quality service is punished by unforgiving metrics.**

*Source

THE CONTRIBUTING FACTORS.

Specific metrics struggle in **unpredictable** environments.

AN UNPREDICTABLE ENVIRONMENT.

The ever-shifting inventory of a grocery store lends itself to real problems for the shoppers, as they are often forced to replace dissimilar items for ordered items, and must deal with food quality issues. Grocery stores also have weaker inventory measures than warehouses.

TURNOVER STRUGGLES.

There is a very high turnover rate for Instacart shoppers - some divisions fire 15% of their workers weekly.* This has a critically demoralizing effect, spurring workers to strive to please metrics at the expense of service - decreasing both service and happiness.

TIME IS MONEY.

According to Instacart's founder, every minute saved on delivery is worth 25 cents. This has led Instacart to employ harsh and detailed metrics, causing significant amounts of stress and quality issues. The metrics serve as a roadblock to customer-oriented shoppers, seen previously.

JACK OF ALL TRADES.

Instacart shoppers are expected to take on multiple job roles all at once - loading/unloading, checking out food, delivering, and providing an excellent customer experience. The latter takes a significant hit due to the added stress of the job.*

We need to create human- and service-oriented metrics - without sacrificing function.

*Source

THE OPPORTUNITY.

What's the benefit?

#1: FEWER MISTAKES.

23% of Instacart customers have encountered **mistakes and poor customer service** due to shoppers. By emphasizing service rather than speed, we can reduce these mistakes and improve service - in an industry where **service is critical.**

#2: BETTER SERVICE.

Customers are willing to pay higher prices for excellent service. By better optimizing shopper metrics, **Instacart can significantly reduce stress and improve it's service to customers** - without cutting profit margins.

#3: GREATER SATISFACTION.

Employee satisfaction is a core problem with shoppers, resulting multiple walk-outs and strikes - affecting both reputation and revenue. Our metrics-based solution addresses the customer by addressing employees, **reducing stress via gamification.**

#4: HIGHER BRAND REPUTATION.

Repetitive shopper and order mistakes are causing negative word of mouth and lower appeal - harming Instacart's plan to hire over 750k workers. By improving stress and performance, we can magnify both employee and customer satisfaction - enhancing reputation and sales.

Some more benefits...

Addressing this problem helps more than just shoppers + customers.

01 A better reflection of progress.

Metrics are primarily responsible for giving a forest-view of progress. If inadequate metrics are set, then the view presented may not be reflective of real-world progress and objectives. Ensuring that the right metrics are set makes sure transparency and reliability.

02 Making better desicions.

With better metrics, come better insights about employee performance and needs. Precise and accurate data is often a necessity to make calculated, large-scale desicions - something that reliable metrics provide.

03 Room for improvement.

"If you can't measure it, you can't improve it." Incorrect metrics prevent organizations from seeing critical issues, potentially magnifying them and delaying solutions. The right metrics can help identify problems when they occur - rather than later when they become more expensive to repair.

By improving metrics, Instacart lowers stress and improves service - **while gaining new, valuable, and unseen insights.**

THE SOLUTION.

Let's fix this.

Gamifying shopper metrics to boost happiness and efficiency on the job.

SOLUTION OVERVIEW.

Gamifying shopper metrics.

OBJECTIVES

Phase 1 breaks down the traditional order list into service and order based objectives - rather than rushed decisions. This decomposes down larger orders into assigned, concrete steps - streamlining focus and reducing stress.

POINT-BASED SYSTEM

Phase 2 measures shoppers on a abstracted point-based system - rather than raw metrics. This system awards **points per objective** - reinforcing small, positive behaviors and incentivizing consistency - with **streaks**.

PERKS AND REWARDS

Research shows that humans perform best when motivated by rewards - not punishments. That's why phase 3 introduces a better reward + perk system, using metrics and points to reward and promote excellence - instead of punishments.

These phases converge to improve shopper efficiency + happiness, enhancing customer experience.

PHASE **1.**

Introducing Objectives.

SMART GOALS.

The current system doesn't offer clear tasks- rather, it separates orders into food groups and adds an element of choice.

On average, shoppers take 6 seconds to input a found item into the app - having to repeatedly choose which item to shop for next.*

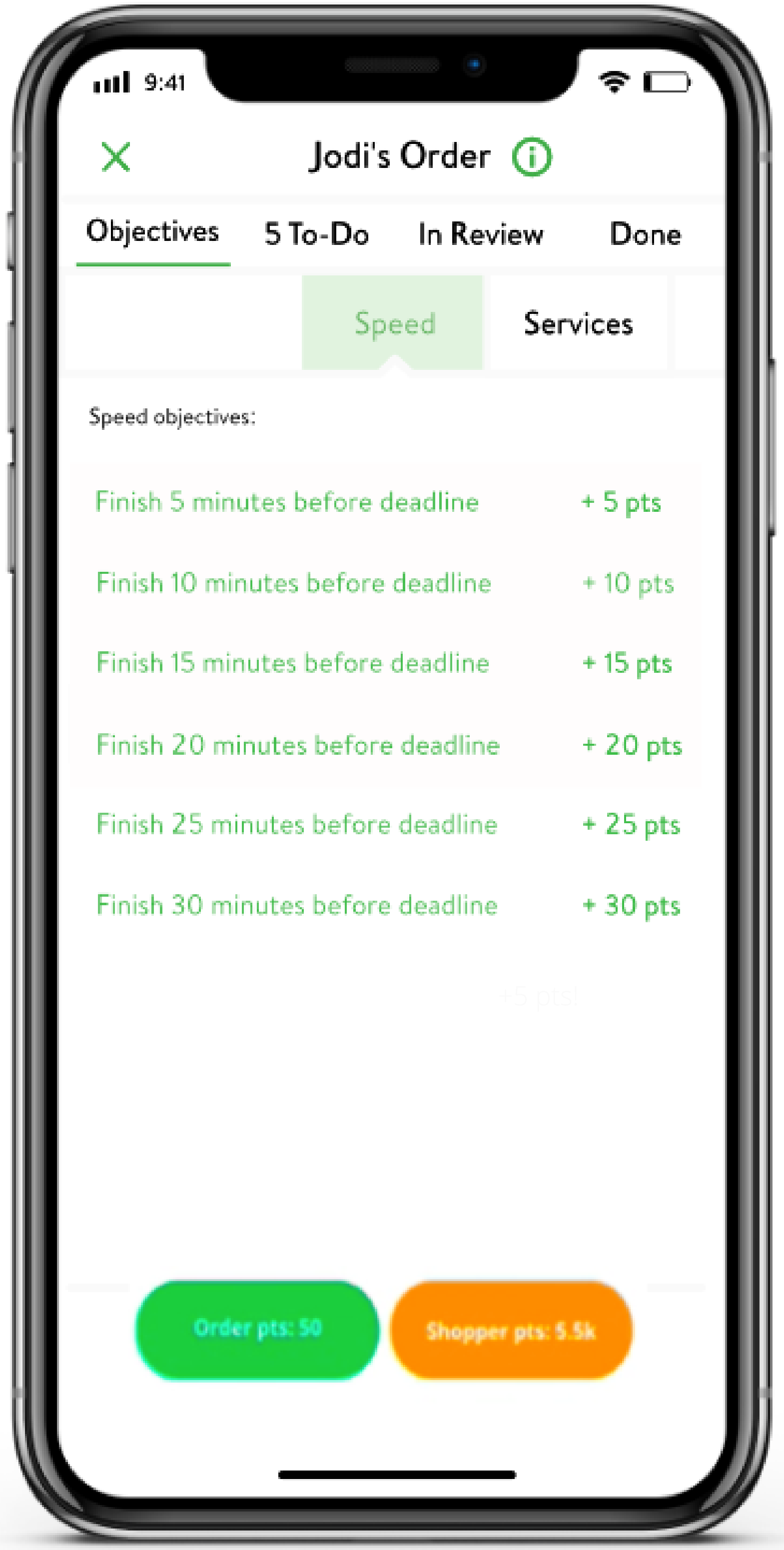
We can streamline this process by introducing objectives - clear targets.

The new system offers objectives oriented around service and efficiency. These goals are specific and incremental, allowing for streamlined focus and effort on a specific task.

This is essential for introducing rewards at the end of each goal.

Objectives take advantage of instant gratification - reinforcing a positive action via a reward, and encouraging it's repetition. By introducing objectives, we streamline shopper decision-making.

Phase 1 lays the groundwork for Phase 2 - 3: the points and rewards system.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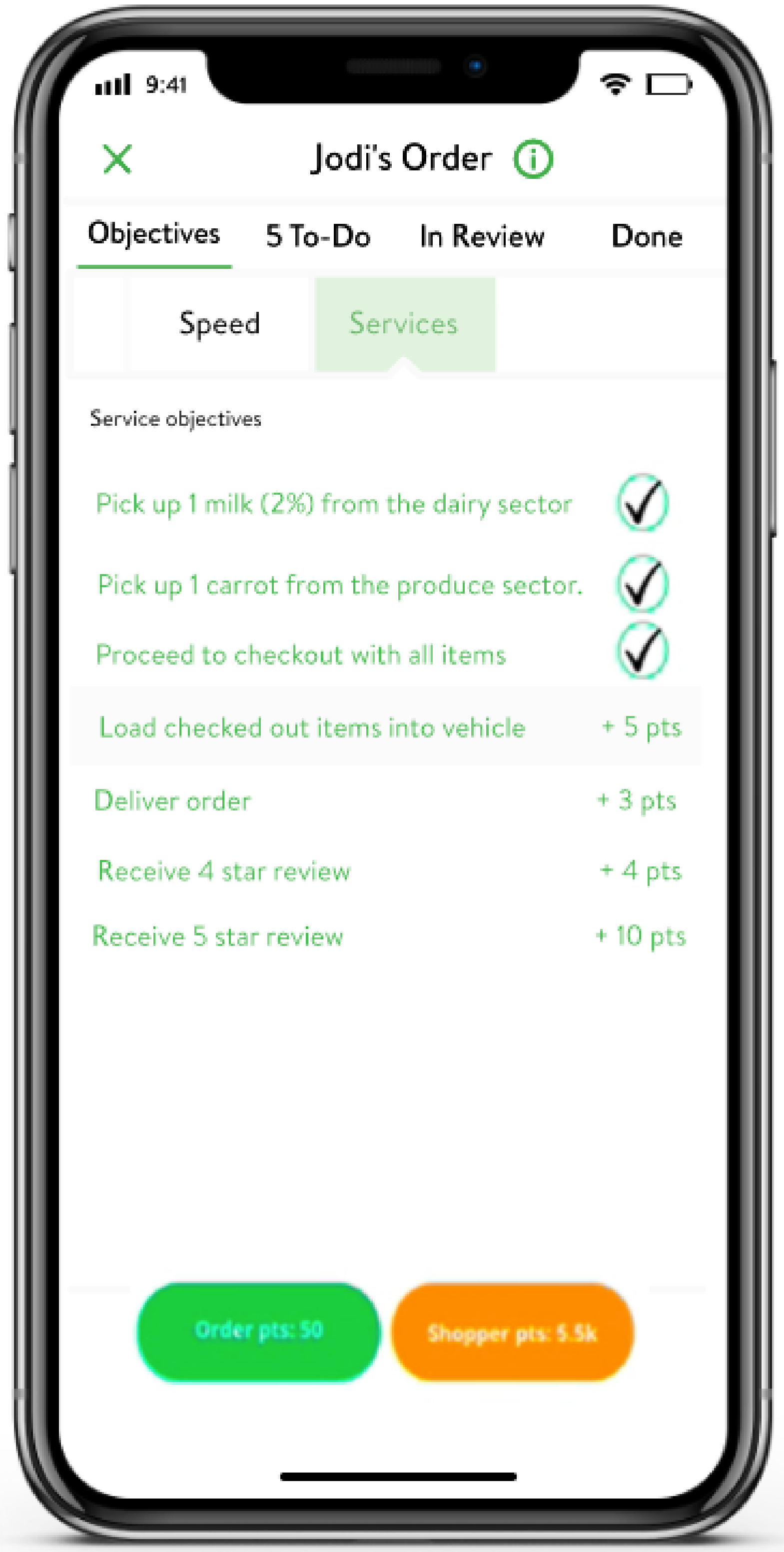
Jodi's Order
Objectives
5 To-Do
In Review
Done
Speed
Services
Order pts: 50
Shopper pts: 5.5k

Speed objectives:

Finish 5 minutes before deadline	+ 5 pts
Finish 10 minutes before deadline	+ 10 pts
Finish 15 minutes before deadline	+ 15 pts
Finish 20 minutes before deadline	+ 20 pts
Finish 25 minutes before deadline	+ 25 pts
Finish 30 minutes before deadline	+ 30 pts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Jodi's Order
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Service objectives

Pick up 1 milk (2%) from the dairy sector	✓
Pick up 1 carrot from the produce sector.	✓
Proceed to checkout with all items	✓
Load checked out items into vehicle	+ 5 pts
Deliver order	+ 3 pts
Receive 4 star review	+ 4 pts
Receive 5 star review	+ 10 pts

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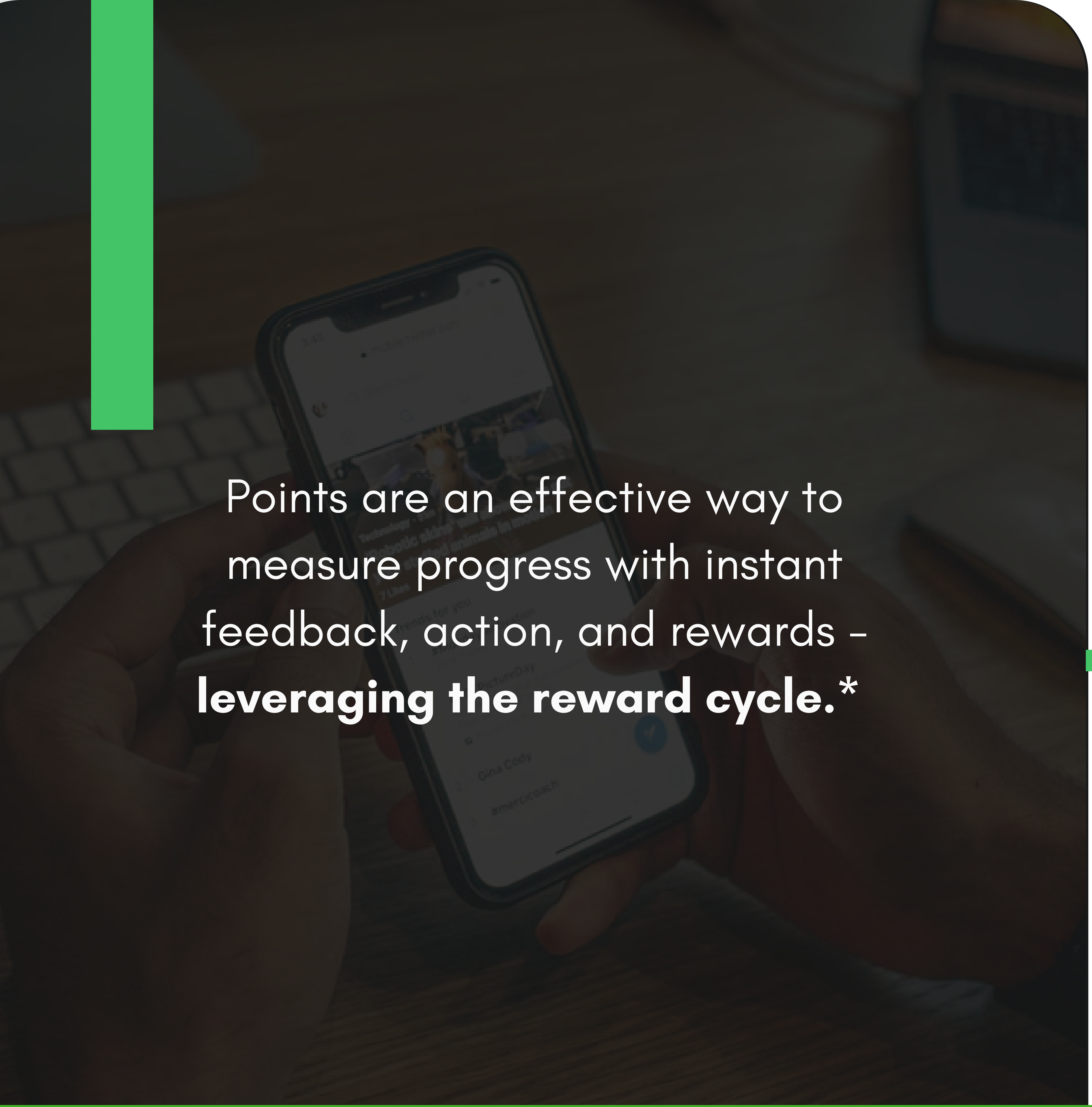
*Found from surveys and videos



Points are an effective way to measure progress with instant feedback, action, and rewards – **leveraging the reward cycle.***

PHASE **2.**

A better way to measure progress – points.

The current metric system thrives in specificity, but it lacks motivating factors – a critical part of the reward cycle. Shoppers can view their metrics and attempt to improve them, but the only factor motivating them to do so is via punishments – getting a reliability incident, and potentially even losing their job.

Points are given at the end of each objective + for faster execution – providing a reward for completing each task, and measuring goal progress. are instantly added to the tracker and displayed in real-time.

This provides instant gratification + instant rewards – providing a strong motivational factor for shoppers.

With points, shoppers don't need to worry about seconds and metric pleasing – they can instead focus on completing more, quality objectives, and gain points as rewards.

This also enforces metrics to ensure both speed and quality – breaking tasks down to reduce stress

*Source

Rewards motivate employees to continue providing excellent service.

PHASE 3.

A potential rewards system.

POINTS THRESHOLD	RANK	REWARD
1000 POINTS	NOVICE	LOCAL ONLINE ACHIEVEMENT BOARD*
5000 POINTS	INTERMEDIATE	COMMEMORATIVE BUTTON + FREE PAID SHIFT HOUR
10 000 POINTS (REPEATS)	ADVANCED LVL (# OF 10K) EX. SHOPPER 20K PTS IS ADVANCED LVL 2	$20 USD
TOP 100*	ADVANCED	$100 USD
TOP 10*	EXPERT	$1000 USD
TOP 1*	VETERAN	$10,000 USD

instacart

*On the Achievement Board, updated every month/week depending on # of employees.

WHY USE GAMIFICATION?

01

ACHIEVEMENT.

Achievement is a driving force behind motivation and action. When workers have clearly defined objectives, measurable performance. and end rewards, efficiency has been shown to improve significantly. Instacart can reap these benefits by gamifying metrics.

02

REINFORCEMENT

Gamification reinforces positive behavior and habits - providing instant gratification for desired actions.* **Companies like Dominoes and Google use this principle to improve employee performance** - Instacart can leverage gratification to improve shopper performance.

03

ENCOURAGEMENT.

Gamification has been found to decrease stress and anxiety - two of the greatest performance hindering factors for shoppers.** Implementing a metric system based around this principle simultaneously allows for greater shopper happiness and encouragement, while reducing service mistakes.

04

+REWARD, -PUNISHMENT.

Research has found that rewards are more effective and encouraging than punishments (see reward cycle). Contrary to this, the current metric system focuses on punishing shoppers via reliability incidents. Our gamified metrics focus on rewarding + incentivizing shoppers with points - allowing for more growth and better efficiency.

*Source ,**Source

REAL-WORLD TESTIMONIES.

Gamification has **real impact.**

LiveOPS.*

LiveOps is a call center outsourcing firm.

Benefits from adding game elements:

- Call times were reduced by 15%
- Sales were increased by 8%!
- **On average, customer satisfaction increased by 9%.**

NTT Data.**

NTT Data is renowned IT consulting firm.

Benefits from adding game elements:

- Leadership management identification
- Created more effective centers that generated ˜5 million in new services
- **Only invested ˜$1 million: 500% return.**

*Source ,**Source

A CASE STUDY.

How gamification revolutionized Domino's Pizza.*

THE GAME

At the end of 2011, Domino's Pizza released a wide-ranging gamification app for customers that enabled them to both order from Domino's and have a fun time in one fell swoop.

THE FINANCES

By April 2012, only a few months after its release, the app had contributed $1 billion in sales, which amounted to 30% of all online Domino's sales.

THE RISE

The app saw tremendous growth. On Android, the app hit 144k downloads only two weeks after release - a number which is almost equivalent to the full populations of Savannah or Bridgeport.

THE RELEVANCE

In Instacart's system, the shopper acts as a customer that needs to actively pick and choose food to buy. Domino's targeted the same demographic, and they achieved great success very quickly, both as a company and in terms of satisfying their customers, who are equivalent to our shoppers.

*Source

HOW EMPLOYEES FEEL ABOUT GAMIFICATION.

The results of a 2018 survey.*

90%

OF EMPLOYEES STATED THAT GAMIFICATION WOULD GARNER THEM BETTER RESULTS.

87%

AGREED THAT THEY WOULD SPEND MORE TIME ON GAMIFIED SOFTWARE.

reallygreat.site.com

85%

REPORTED THAT PRODUCTIVITY INCREASED WITH THE IMPLEMENTATION OF GAME ELEMENTS.

reallygreat.site.com

*Source

ISSUES WITH GAMIFICATION.

AND HOW WE TACKLE THEM.

PRODUCTIVITY.

Gamification is an excellent method to get **shoppers motivated.** However, this doesn't have to be at the expense of **productivity.** Our proposed objectives system features goals that incentivize shoppers to focus on outcomes like **speed, and quality service services.**

PARTICIPATION.

Not all gamification systems work well. If employees don't want to participate, gamification can actually lead to inverse effects. This is why our gamification system utilizes competition to drive shoppers rather than hamper them.

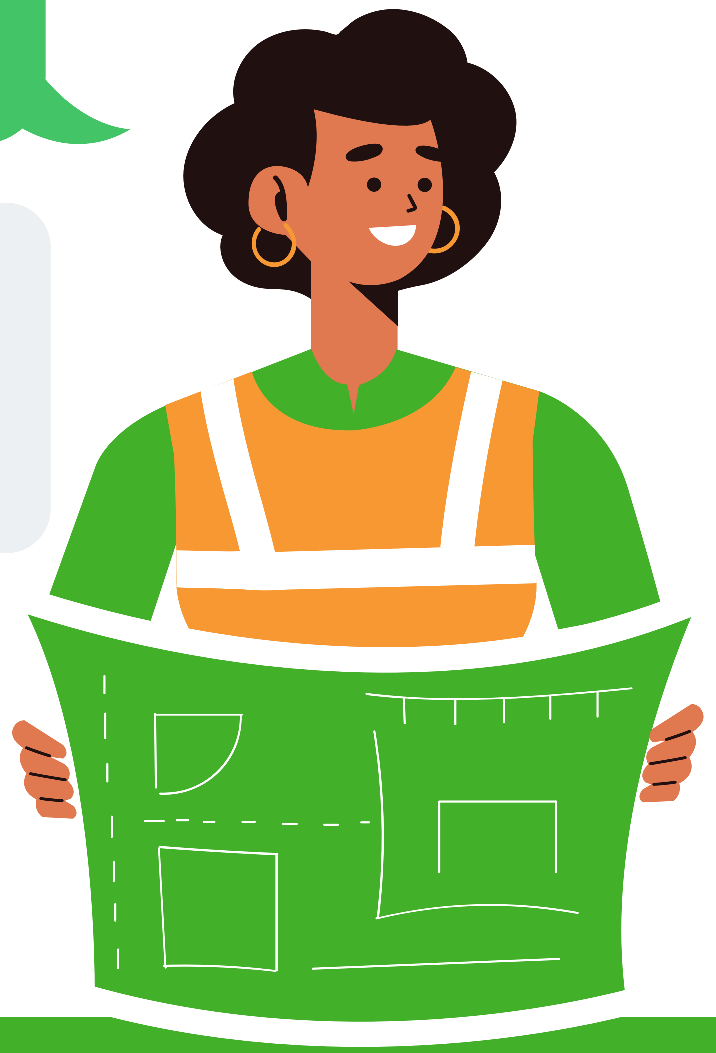
HEALTHY COMPETITION.

In many cases, gamification leads to unhealthy competition. However, the proposed system is not a **zero sum game.** Instead of using placement relative to other shoppers as incentive, our system utilizes ranks based on points. This does provide a sense of competition but **not in an all-consuming way.**

PHASE 4.

IMPLEMENTATION.

Turning the gamification vision into a reality.



SPLIT-TESTING STEPS.

OBSERVATIONS + FEEDBACK.

1. CONTROL.
2. INNOVATE.
3. MONITOR.
4. CHANGE.
5. CHOOSE.

CONTROL & INNOVATE.

STEPS 1 - 2

- **CONTROL - We get a control group of shoppers who use the current metrics and deliver as they would normally.**

  We must first designate a **control group and look at the statistics for this group in their specific area.** It is against this group that we must measure the other, modified-metrics group.
  The control group is made of shoppers who shop using the normal metrics.
  We will regularly survey the shoppers in this group about how much stress they feel, the highest quality of customer service they feel they can give, and their suggested improvements.
  We will also pay close attention to what the customers think and monitor the stars that they give to shoppers, as well as the substance of their views. If necessary, we will also provide them with special surveys and take note of their answers.

- **INNOVATE - The other group of shoppers uses the next generation of metrics to *make it so* that the new system is tested.**

  We must now establish a **group which works according to our new metrics and systems.** There isn't that much difference between this step and the previous step except this step uses the new metrics rather than the old ones (i.e this group of shoppers will be asked what they think abut the new metrics).

MONITOR & CHANGE.

STEPS 3 – 4

- **MONITOR- We monitor and take notes on both groups of shoppers.**
  We start by taking notes on the new and the old systems. Where are the problems manifesting in the two groups? Are there any specific locations where many problems arise? Is one group facing tougher problems than the others due to factors that we have not imposed on them?
  We start by comparing the two groups. Once we have factored extraneous influences out, what remains? Does one group perform better or worse with the average customer rating? Do the shoppers of one group feel more stressed than the other?
  We take all of this firsthand research and synthesize it into a plan for changes to both groups, getting ready for the final litmus test. We use the information we gleaned to create a framework for the small-scale changes we will execute in the next phase.

- **CHANGE – Based on the failings and successes of each group, we attempt to rectify errors.**
  First, **we execute on the unique, small-scale changes we think will improve customer experience for each group.** For example, if one group underserves one area and therefore has lower customer rating, we direct more shoppers towards that area.
  Second, we start collecting information and input from the customers and the shoppers concerning the new changes. We continue to improve and build upon our systems based on these inputs.

CHOOSE

STEP 5

After we have gone through several rounds of changes suggested by our customers and shoppers, we make a final decision on the plan we adopt going forward, iterating and improving over time.

POTENTIAL COSTS.

RAW PRICING.

Gamification in general can cost up to $25,000*. However, that price is only for completely integrating every system in a given app with gamification - we aren't doing that. As such, the price of gamification ranges from $2,500 to $10,000.

ESTIMATES.

Most gamification services are geared towards medium-sized business with an average high of 200 full-time employees.
Instacart is planning to employ up to 750,000 shoppers who work a maximum of around 29 hours a week, or 75% of a full-time worker's hours.

THE MATH.

Using these tools, we can estimate that the final estimated price is $37.5 million - $93.75 million, spread across 750,000 workers at a rate of $10,000 - $25,000 per every 200 workers.

With a current valuation of $17.7 billion and $2.4 billion allocated for funds, the gamification cost is around 3% of funding and 0.5% of the total valuation of Instacart - a viable tradeoff.

MARKET EXAMPLES.

Xoxoday, the highest-rated gamification company, retails its services for around $5000, oriented towards small businesses. However, it also provides services for firms like Infosys and Pepsico.

*Source

What we don't know.

Things you might want to look into.

What's the best way to gamify?

A point-based system is well-adapted to Instacart's service model - but it's far from the only solution.

It is entirely possible that another, more effective solution exists - but can only be found via iteration and testing, part of our executional suggestion.

Would delay increase stress?

While employees think that gamification is a welcome change, employees may take more time than expected to adjust to the new system.

It's imperative that constant feedback is being taken by testing to quickly react to these scenarios.

Training restructuring?

Changing these metrics means that new employees would have to be trained according to this system.

While this shouldn't be a problem, testing the efficiency of a new training process should also be incorporated and evaluated.

Thank you Instacart!

We want to take this opportunity to truly thank you for giving us the chance to accompany on your mission - making food accessible to everyone.

Working on this challenge has been an absolutely incredible experience - **solving a real world problem and impacting real-world customers.**

This was an amazing opportunity to research, analyze, and implement a solution - making an impact and learning new skills along the way. this wouldn't have happened without you!

We hope our recommendation was beneficial to Instacart's service and experience!

Aditya Dewan

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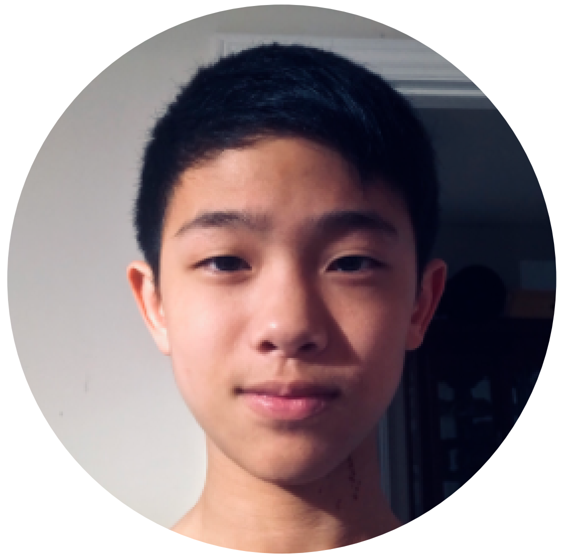

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Anirudh Chamarthi

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