Rapid Innovation Framework

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JUST EAT

Focus stage

Step 1

Opportunity validation

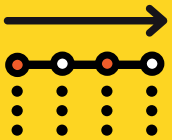
Step 2

Identify core job

Problem stage

Step 1

Define steps to optimise



Step 2

Identify outcomes

Step 3

Refine outcomes

Step 4

Survey audience

Step 5

Prioritise outcomes

Solution stage

Step 1

Coming soon...

How does a large organisation rapidly innovate their existing product or break into a new opportunity space? In this paper we'll share how Just Eat retain a technological lead in a highly competitive space.

Just Eat are the world's leading global food marketplace, operating in a space we have lead for over fifteen years. The food tech space is highly competitive with a large number start-ups appearing and disappearing each year. Over the last few years we have developed a finely tuned innovation framework that ensures our position as the industry leader.

The framework is not a dogmatic set of rules that if followed guarantee success. Rather, it is flexible collection of chronological methodologies that enable innovators to rapidly validate the most needed solutions for the problems their audience face.

The framework can be reduced to three key stages:

The focus stage
The problem stage
The solution stage

To complete each of these stages, we have used, merged and modified methodologies from Strategyn, Clayton M Christensen, Jeff Gothelf, Josh Seiden, Eric Ries, Tomer Sharon and Disruptive Lemonade. The methods you choose to employ could differ from what we propose, even within Just Eat different teams employed different methods to suit their needs. There is no golden formula, as each team is made up of different personalities with different strengths. It is important to settle on the methods that best suit your team and the problem space. Throughout the paper we will provide examples of the methods we found most effective.

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Finding the focus

Opportunity validation

Justify launching your project

Before investing your time and resources innovating in a particular space, it is essential you assess whether there is a compelling enough business case to proceed. If you were raising capital for a new product, the logical way to pitch investors would be to first explain the problem, then present your solution and finally convince them it's worth investing by demonstrating the market opportunity (defining the market and its monetary size).

Not too dissimilar to the pitch process, with this framework we start with the market opportunity, then we identify the problems and finally explore solutions. Just like an investor wont invest in an idea unless they know there is big enough opportunity to justify funding. So to, you should not invest your resources in an innovation project, unless you have validated that the market exists and is large enough to warrant investment.

The validation technique may vary slightly depending on whether you intend to enter a new market or improve an existing product, however the objective remains the same - to loosely size the opportunity. When entering new spaces we initiate a market study that describes the market, the audience, the competitive landscape, but most importantly the size. While when innovating on existing products we describe the same things, with the addition of existing behaviour - unlike the new space, this data tends to be far more comprehensive and accurate.

At this early stage you may have already detected potential needs and problems, you may even have a hunch for what solutions may work. However, it's important not to let this bias you, as much more detail will come out further downstream. Instead at this stage you're simply sizing up the market to see if it is worth proceeding.

Identify the core job to focus on

Setting the area of focus for the study

Once we've confirmed that the market has potential, we stop asking questions about who could use the product and instead begin to explore why they would use it. This breaks from conventional innovation processes which often start with "*57% of people do [busy families buy takeaways]*". Instead we try to identify what people are trying to accomplish. Tony Ulwick (Strategyn), Bob Moesta and Clayton M Christensen developed a method for doing this, which they call the Job To Be Done (JTBD).

The Jobs To Be Done method is a great way of ascertaining the core reasons people are using your product. The "*jobs*" are the tasks people are attempting to accomplish when they hire your product. For example, the obvious job people hire Starbucks to do is get a cup of coffee. But is that the only job? If you spoke to people inside a Starbucks outlet you may find they came there primarily to use the internet, meet friends or relax and that coffee was actually a secondary job.

With so many potential jobs a person could hire your existing or potential product for, one of the biggest priorities in this early stage is to identify the numerous 'core jobs' that exist in the space you wish to innovate.

Quick guide

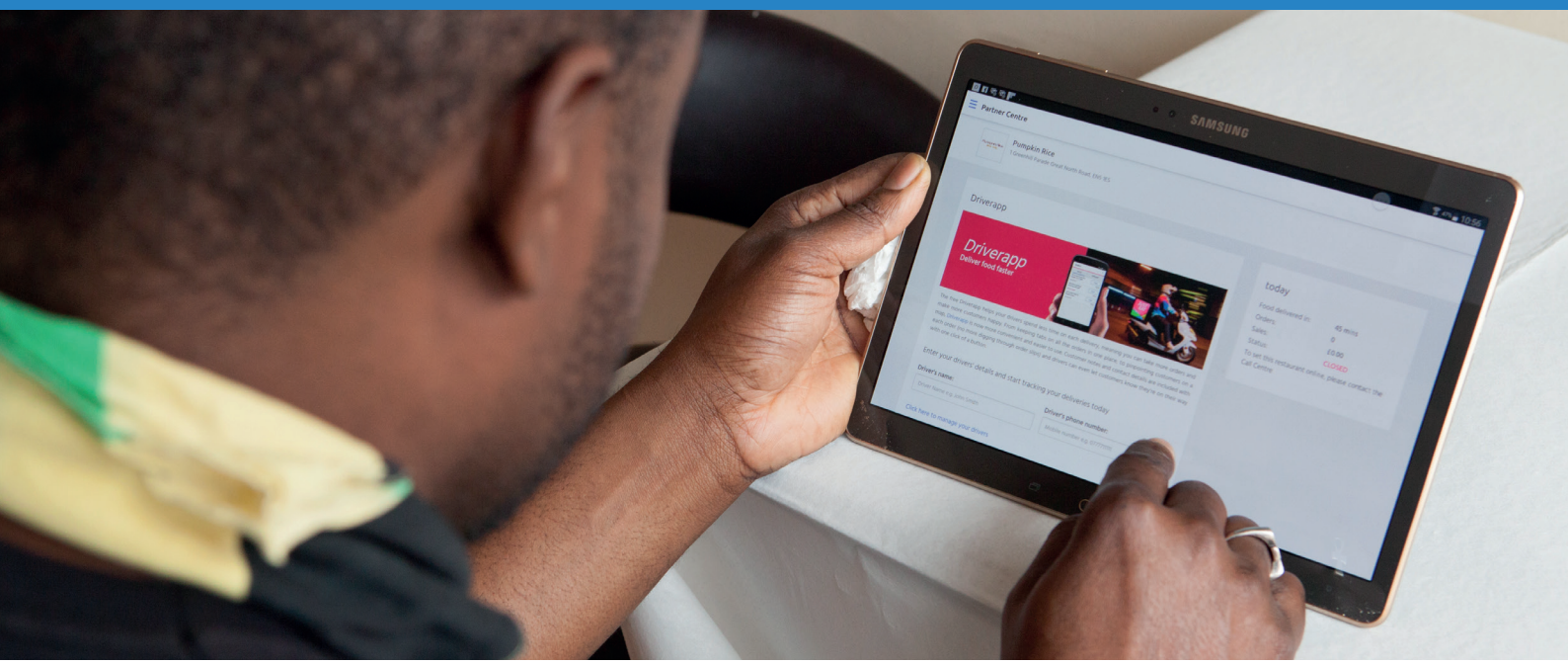
Facilitate qualitative interviews to identify the core jobs people are trying to achieve.

These interviews are focused on:

- Talking through jobs the participants have tried to complete in the past
- Getting a qualitative read on which jobs are the most important or frequent

We facilitate nine interviews for this stage.

Use the market study or existing data to recruit the right people, they should be representative of the audience you are attempting to target (e.g. Households that have evening takeaway delivered).



Once you have identified these jobs, you can then assess which one you want to focus your study on. The selection of this core job will have huge consequences on everything that follows. An innovation study that focuses on "*Getting a takeaway evening meal delivered to your home*" will yield very different results to "*Getting a takeaway*".

When determining which job you prioritise, it is important to be realistic. Toothbrush manufacturers may discover that their customers are also using toothbrushes to clean grout in their bathrooms. However, if they set this as the core job, the soft bristles would likely be replaced with gum-shredding wire and they could introduce a bleach shooting nozzle. These features would be a great addition for cleaning grout, but disastrous for cleaning teeth.

When deciding on the core job, you should focus on the one that represents the biggest opportunity. In most cases this will be the job that people most frequently hire the product for. In Just Eat's case this was "Getting a takeaway evening meal delivered to your home."

Tips

If you set too vague a job at this stage, your study will lack the required focus. In our example, failing to define the 'evening' and 'delivery' clauses would have meant introducing complexity, by considering factors that are only relevant in scenarios that apply to a small proportion of our customers.

The problem stage

The success of this framework is that it eliminates guesswork, rather than assuming what people are trying to achieve, we let them tell us. Once we've extracted their desired outcomes we quantify them at scale so that we can confidently identify problems that best lend themselves to innovation. Everything comes from the user, everything is evidence based.

Define the steps to optimise

Understanding the user's workflow

Unless you are entering an untouched space, your target audience are already completing the core job, either with your product or someone else's. Knowing how they do this will enable you to probe into which areas are most suited for innovation.

If you've set your core job at an appropriate level of granularity, there will be certain steps that everyone must go through to complete that job. For instance when getting a takeaway evening meal delivered to your home, everyone would go through the following steps:

- Step 1 - Choose a restaurant
- Step 2 - Choose dishes
- Step 3 - Pay for the food
- Step 4 - Wait for delivery
- Step 5 - Receive the food

Quick guide

Initially as a team try and work out what these key steps are, based on your own domain knowledge.

Next recruit a large number of participants for one-to-one interviews from the target audience. The objective of these interviews is to identify the steps in the job map, but also to begin to collect the outcomes they're trying to achieve. We recommend using the first few interviews to capture the steps in the job map, which then become a guide for the later interviews.

It is critical that you speak to the right people, interviewing the wrong people will mean you surface irrelevant and misleading insights. For instance if we spoke to people who were collecting their takeaway - the problems they faced would be a country mile from those who had it delivered.

Tips

A functional job like chopping a piece of wood lends itself perfectly to a sequential job map. However, we found that with a complex job like "*Getting a takeaway*" it is much harder to force each scenario into one map. Ordering lunch at work will look very different to ordering a takeaway in the evening. We found setting the correct context at the core job level increases the ease of this stage, in our case this was adding "*Getting a takeaway evening meal delivered to your home*"

We first attempted to define the universal steps from our own personal experiences. Once we had a loose map we used it as a conversation guide during the interview. We would ask users to describe their last experience and validate whether new steps emerged and whether existing ones needed refining. By allowing the customer to set the steps from their previous experiences it greatly increased the accuracy of our map.

Don't spend too long trying to work out the steps, these will flow from your participants as they describe their experiences.

These steps are recorded in an artefact called a job map. A good job map describes the sequential decisions a user makes independent of the solution they use. The job map then serves as a guide for capturing the customer's desired outcomes at each step of the decision making process. These outcomes are captured in the next stage when interviewing the users.

Strategyn who introduced the concept of a job map, have conducted years of research into them and found that as general rule there are eight steps to every job. However, we found that attempting to religiously adhere to eight steps was time consuming and created an unnatural flow.

Make sure you have participants from the key areas of focus. If your market study showed there were key differences between households in the suburbs and households in rural areas - make sure your participants are representative of those two locations

During the interview we have the participant talk us through the last time they completed the job. For a less frequent job than a takeaway meal, you may not want to restrict it to their last occasion. However, asking them to talk through a specific example is more likely to yield accurate and useful insight.

During the interview each step is written on post-its as it is surfaced by the interviewer, even if they differ from the steps we identified or have collected from other participants (it is more important to be true to the users experience, than to force their experience into our map). These post-its then became a cue to ladder down into the numerous decisions that they make and the outcomes they attempt to achieve at each step.

Although we never stop asking the user to describe their own job map, after around eight interviews we're usually able to identify the common steps they share. This helps inform future interviews.

It is essential that all interviews are recorded on video.

Identify outcomes

Capturing the outcomes at each step of the job

To build a solution that offers your customers an improved way of accomplishing the core job, you must discover which outcomes within a job are desired the most. A single job can have hundreds of desirable outcomes, with dozens of these outcomes nested under each step of the job.

For instance, our example job may contain the following desired outcomes:

- Minimise the risk that something is missing, when I receive my order
- Increase the likelihood that I am aware of all charges, before I am asked to pay for my order
- Maximise the likelihood that I know the portion size of a dish i have never ordered before, before I order it

You may have noticed that these desired outcomes follow a similar format. That's because outcome statements conform to a specific structure following a set of stringent rules established by Strategyn. This is necessary because differences in structure, terminology, and syntax from statement to statement will introduce unwanted sources of variability that would reduce the accuracy of the survey stage that follows.

The rules they follow are:

> **[Direction of improvement] ... [Unit of measure] ... [Object of control] ... [Contextual clarifier]**
>
> **[Increase]** the **[number]** of restaurants that have **[fresh food] ... [e.g., not sitting on a shelf for too long, not stale, not out of date etc.]**

Any seasoned qualitative researcher should be able to facilitate the interviews. They simply talk the participant through their past experiences applying the laddering technique at each step of the job to extract the outcomes. For example, when asked why they chose the last restaurant they ordered from the participant may say something like "*I wanted quality food*", the interviewer could ask "*what do you mean by quality*", they could respond "*you know something fresh and tasty*". By applying the laddering technique the interviewer has not just removed any ambiguity around what quality means, but more importantly, identified that the participant wants fresh tasty food.

Knowing the need exists is only part of the picture, we now have to identify how well this need is met. Continuing with the laddering technique the interviewer could then ask "*how easy or difficult is it to get fresh food?*", this could lead to the participant explaining that there's only a couple of venues they're aware of that serve this. Alternatively it may not be a lack of supply but how long it currently takes to find the restaurants that serve fresh food.

We have now laddered our way down to the core of the outcome statement, in this example the object of control is freshness, while the unit of measure is the number of restaurants, which can be improved by increasing how many of them there are. In outcome language this is "[**Increase**] *the* [**number**] *of restaurants that have* [**fresh food**]" .

This is where one of the most powerful techniques is introduced, the outcome is then played back to the participant during the interview. This ensures that we're capturing the actual desired outcome, if we were to ask them "*is it important to reduce the time it takes to find fresh food*" or "*is it important to increase the number of restaurants that serve fresh food?*" They can confirm their intention. We lost track of the amount of times we replayed an outcome to a user only to find we'd misinterpreted what they were saying.

We adapted Strategyn's interview structure to include an observer, in our setup the observer watched the interview over Google Hangouts listening to the outcomes as they surfaced and then sent them via live chat back to the interviewer. This was done to try and minimize the likelihood of miss desired outcomes, as both the interviewer and observer were listening out for them. As the interviewer replayed these outcomes the observer would record the exact time it was said.

Timestamping the outcomes saves hours and hours of time later in the project. During the later stages when visualising the problems users face and their potential solutions, it is essential to know the stories and users behind each outcome as this will help contextualise the solutions that are designed. Timestamping will enable you to quickly reference your video footage to create video clips, personas, etc.

Quick guide

You should recruit a minimum of 16 participants to interview with the objective of identifying the outcomes they're trying to achieve when completing your core job. This is the same panel that you recruited to capture the job map.

When facilitating the interviews use laddering to drill down to the outcomes. A ladder interview uses follow up questions that probe deeper into the detail.

When laddering watch out for adjectives, in the fresh example we provided, we were not specific enough as the participant could have meant either freshly prepared or fresh ingredients. Use the ladder technique to continue to probe until you have extracted the true intention.

Strategyn devised a set of rules for writing outcome statements which we loosely followed. We strongly encourage you to treat these as a guide, rather than a religious instruction - if they're taking too long you're taking it too seriously. Your primary objective for doing this is to be able to record at a quantitative level how important each of these outcomes are and how well met this need is. Your objective is not to craft the perfect outcome statement.

An example of us taking too long was after spending two weeks refining our outcome statements, we saw the following improvement to one of them:

- ***Original:*** *"Increase the likelihood I can find a variety of things to eat within my budget"*
- ***Refined:*** *"Increase the likelihood I can get a meal that I want within my budget, e.g., the amount I have set myself that day, the amount I want to spend, etc."*

Clearly there is barely any difference between these and if surveyed, both statements would probably produce a similar response from the respondents. Ideally, outcome statements should be repeated and confirmed by the participant in the interview.

We found that in addition to the interviewer identifying and relaying outcome statements to the participant, having an observer feeding in outcome statements via live chat increased the number of outcome statements we were able to uncover.

Observers should timestamp as many outcomes as possible during the interview. This makes it much easier to reference in the analysis and creative stages.

Aim to collect at least one hundred outcome statements, these will be reduced during the refinement stage.

Run a pilot interview, so that you can test the process (job maps, outcome statements, observers commenting, etc.).

If you're still getting lots of new outcomes after your last interview, recruit more participants and keep going, if you feel like you've got all your outcomes halfway through then it could worth ending early.

Refine outcomes

Making the outcomes survey ready

The objective of this stage is to refine the outcome statements that you have collected in the interviews so that they accurately reflect the participants sentiment and so they can be easily comprehended by your target audience.

Once you have refined these outcomes they will be prioritised by your target audience in a survey. Ideally each statement should comply with the rules from the previous stage, make sense and be easy to read.

Tips

Refining outcomes is highly subjective, every Just Eat team found that too many chefs considerably prolonged this exercise. It's better to have a couple of people with the full context refining the outcomes, than a large team. You should aim to complete this exercise in a few days, anything more than this is overkill.

Only people that have observed the interview can comment on the outcome. If your CEO doesn't like the wording of an outcome statement, they should not be allowed to touch it unless they have watched the relevant interview. If this rule isn't followed people that lack the context of where an outcome came from will unintentionally twist the wording away from the participants original intention.

When you come to refine the language of an outcome statement or merge two separate statements, make sure you watch the video clip of each interview for the full context.

Quick guide

Each outcome statement should be unique, follow the rules and easily understood.

Map each outcome statement to the step in the job map (this will help you to focus on which areas of the job map present the biggest opportunities).

Aim to have at least 10 outcomes under each step of the job map. However, this is a target number not a requirement.

It's important to document which participant each outcome came from with a timestamp to that clip.

If you have evidence of outcome statements that weren't mentioned by your participants, don't be afraid to introduce them. Ensure that the evidence of where they from is included (e.g. the market study, existing company analytics, etc.)

Collecting outcome statements involves talking to lots of people who are describing similar scenarios, inevitably participants will describe the same outcomes in slightly different ways. Even the best interviewer / observer will at times record these as separate outcome statements. Part of the refinement process is removing these duplicates.

Survey audience

Quantifying the outcomes

This is the heart of the framework and one of the key reasons we incorporated Strategyn's ODI framework into our own.

In the past we'd struggled to find an effective way of prioritising the problems we were solving. Qualitative research provides great depth and richness, but when it comes from just 1 or 2 users, there is no way to understand whether its reflective for your wider customer base.

Strategyn's solution was marvellously simple.

They took hundreds of outcomes that they'd captured in qualitative interviews, and included them in a survey. They did this because, while the interviews created real empathy with the target audience and nurtured a deep understanding of how they related to each job, there was no way of measuring just how important an outcome was, nor how well this need was met at market level.

A successful innovation strategy requires a mechanism to successfully identify the biggest opportunities, and that's what Strategyn unlocked. By simply asking a large number of people how important an outcome was to them and how satisfied they were with their ability to achieve that outcome, they were able identify the biggest opportunities.

It was this simple survey questioning that really appealed to us, it meant that we were able to measure the demand for solving particular problems. The interviews only took us part of the way, now we could find ourselves in a situation where an outcome surfaced in the interviews by a lone participant turned out to be the biggest opportunity when surveyed at scale.

The survey includes all of the outcome statements, presented in the order of the job map. Two questions are then asked for each outcome:

- **How important is it to [outcome statement]**
- **How satisfied are you with your ability to [outcome statement]**

For both of the above, the answer is given on a scale of 1 to 5, where 1 is least important/satisfied, and 5 is the most important/satisfied.

Quick guide

It is essential that you survey the right people, sending a survey to the wrong audience will undo all of your hard work and send you on a wild goose chase.

Screen the correct people in and out of your survey. This screener should match the one that you used to recruit your interview participants in the qualitative stage.

The survey should include all of your outcome statements.

The survey should follow the flow of the job map. By presenting outcomes in a chronological flow, the user is not moving backwards and forwards when contemplating the outcomes - everything is intuitively contextualised.

Be sure to include profiling questions (this should include the obvious ones like age, location, gender, etc. but also ones specific to your study like dietary requirements, budget, frequency, etc.). This ensures only relevant statements are presented to respondents, avoiding people scoring outcomes they have no relationship to i.e. asking meat eaters if they want to increase the time it takes to find vegetarian food.

Profiling will also help with both the marketing and solution design.

You should survey enough people so that analysis of segments will be statistically significant (e.g. over 100 per segment), we surveyed 750 people (completes).

We did a soft start of the survey with participants to ensure they understood the outcome statements.

How satisfied are you...					How important is it to...				
a) With your ability to meet your health goals, e.g., a balanced diet, building strength, losing weight, etc.					b) Increase the likelihood of meeting my health goals, e.g., a balanced diet, building strength, losing weight, etc.				
1	2	3	4	5	1	2	3	4	5
○	●	○	○	○	○	○	●	○	○

Tips

One of the areas we deviated from Strategyn was in the formatting of the outcome statement as a survey question. The original question format measures how satisfied someone is with their ability to change the performance metric, rather than how satisfied they are with the performance metric and object of control (how satisfied are you with your ability to increase [direction of change] the likelihood [metric] you can get quality meal options [object of control]). If the direction of change and metric are removed we can focus on what we actually care about, how satisfied the respondent is with the current experience.

Keep in mind that measuring current satisfaction is about their the ability to get the job done, NOT their satisfaction with their ability to improve the job. E.g.

- "*How satisfied are you with your ability to increase the likelihood you can get quality meal options*" isn't a metric we care about.
- "*How satisfied are you with your ability to get quality meal options*" not only makes grammatical sense, but answers the question we care about.

So whilst the reformatted satisfaction question measured the status quo. The importance question measured the improvement opportunity.

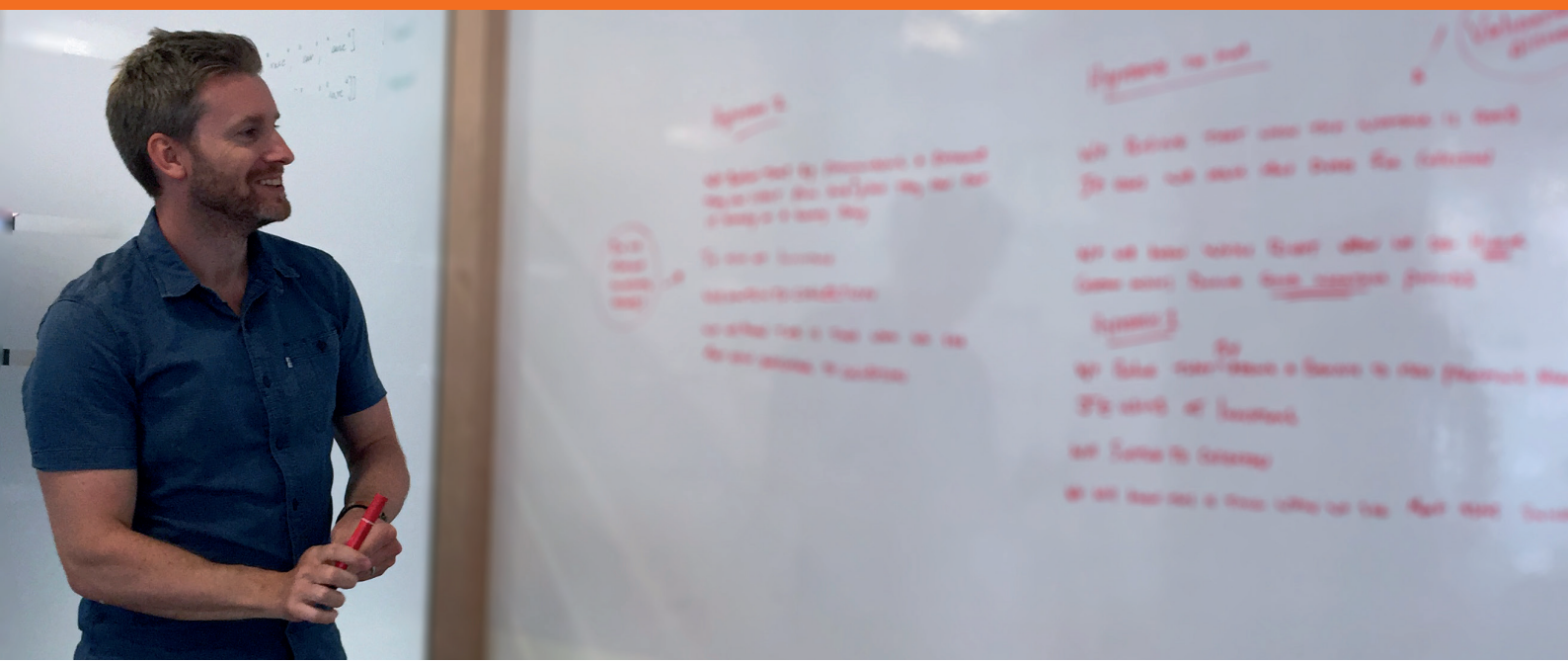
- "*How important is it to increase the likelihood you can get quality meal options*" provides us with a relevant measure of the need for improvement.

Make sure the survey is mobile friendly as the structure of this survey can be difficult to format on mobile.

Don't present all of your statements at once - break them up into batches of 6-8 outcomes at a time.

It is also good practice to rotate the statements within these batches, this ensures that the chronological flow of events of the job map are maintained.

We stuck with the five point rating scale.



Prioritise outcomes

Identifying the biggest opportunities

Once you have the survey results, your analysis will set the strategic direction your product takes. This is determined by identifying which customer needs represent the best opportunities for growth.

To answer this question, you must be able to identify which needs are most important and least satisfied. An opportunity for innovation exists when the relative importance and satisfaction of a need offer the biggest impact on users.

Strategyn developed a formula for quantifying this opportunity.

A need was considered 'important' to the individual if they scored it 4 or 5 (out of 5) on the importance question. Similarly, a need was considered 'satisfied' for the individual if they scored it 4 or 5 (out of 5) on the importance question.

> Strategyn Opportunity Score = (% of users scoring it as important) + (% of users scoring it as important - % of user currently satisfied)

However, we felt that, for a given user need, the Strategyn calculation gave too much credence to the satisfaction of users for whom that need wasn't important anyway.

To get around this, we refactored the calculation.

> JustEat Opportunity Score = (% of users for whom it's Important) + (% NOT Satisfied, among those users for whom the JTBD is important)

Since making this change, we have consistently detected more opportunities with our refined algorithm, while also capturing all of the opportunities that the Strategyn algorithm highlighted.

In terms of interpreting results, from using their algorithm over hundreds of studies, Strategyn deduced that scores over 10 represent an under-served opportunity. However, we opted against setting a fixed threshold, instead considering the relative opportunity of a need against others.

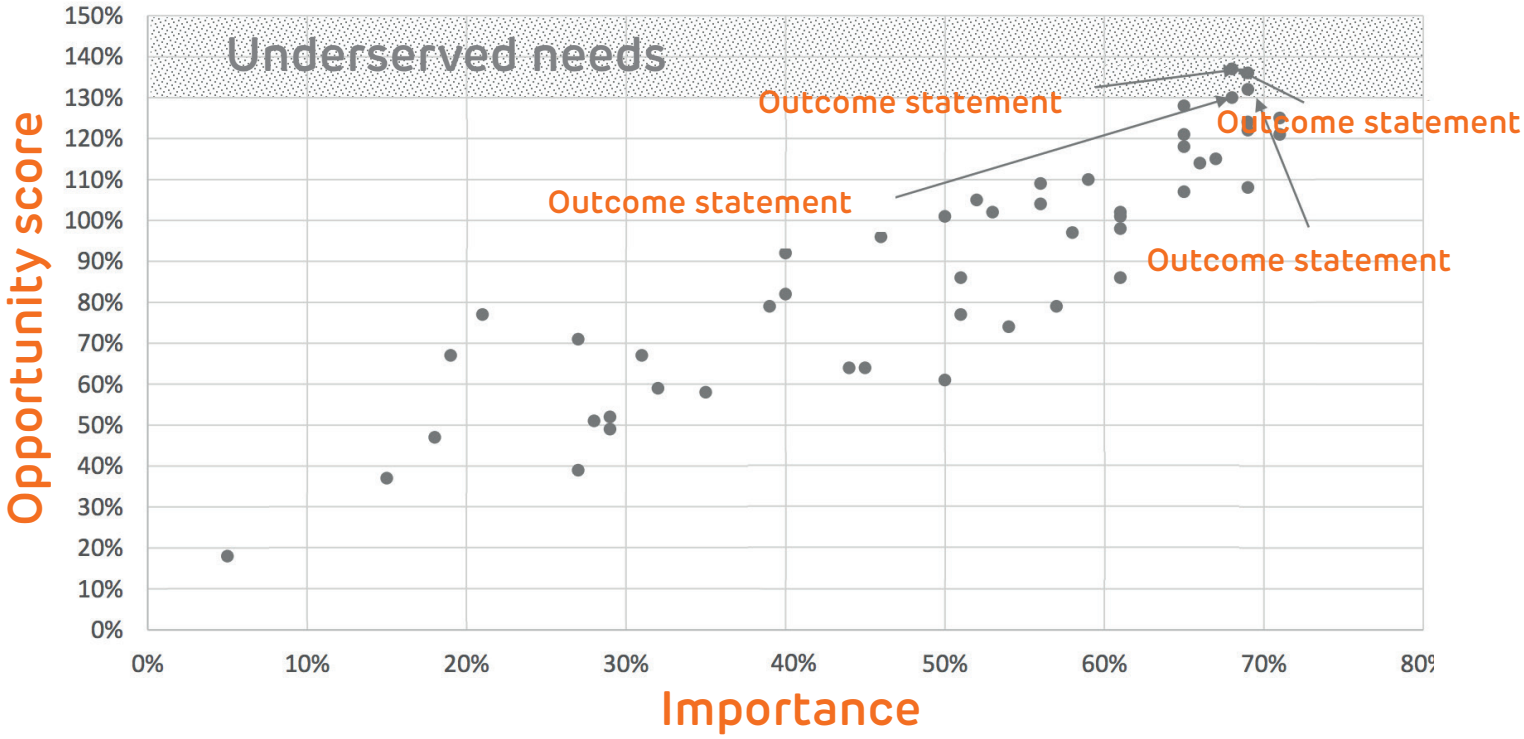
At this stage, further segmentation can be done to identify cohorts of users who have their own highest opportunities. However, as our initial focus was on optimising an existing one-size-fits-all product, we chose to eschew segmentation, and prioritise needs based on their 'all of market' opportunity score.

Quick guide

Run the results of your survey through the algorithm we provided to calculate your opportunity score.

An outcome with an opportunity score of 129 or over is considered under served with this method.

Identify themes from cluster, factor or correspondence analysis. Under served themes should have a number of outcomes with an opportunity score of 129+



Tips

When dealing with a well served category such as takeaway, satisfaction is very high and the data may come back flat. The segmentation then becomes a vital stage to find pockets of the market that are in need of innovation.

When attempting to pull apart the data into segments, not all analysis techniques will yield results. In one instance we used correspondence analysis after cluster analysis was unable to separate the segments.

Closing words

The key to successful innovation is playing to your team's strength and while each team within Just Eat took slightly different approaches, we all loosely follow the same script, drawing on different techniques and methodologies at each stage.

Most of these techniques weren't earth shatteringly original, instead they were often based on existing methods (Strategyn's Outcome Driven Innovation having the greatest influence on our work). What we hope we have done with this paper is evolve these techniques after field testing and encountering the demands and limitations of a fast paced technology industry.

One of the closing pieces of guidance we would like to offer is - be a heretic. Many people treat these methodologies as religious instruction, meticulously sticking to the letter of the law. Each time we tried this it added months on to our projects, by focusing on the spirit of the law, rather than the letter, these projects would have achieved 80% of the insight in 50% of the time.

The only hard rules are to (a) think in terms of underlying user needs/outcomes, and not features, and (b) to validate at scale, against a representative sample.

That said, having your own version of a structured framework will prove useful, for a couple of reasons.

Firstly, for the people doing the innovating, it will provide checks and balances, allowing people to question the thinking of themselves and of others, and ensure no 'feature' thinking or unvalidated assumptions are creeping in. This gives a level of consistency and quality in the work that is done.

Secondly, for those non-Product stakeholders who still think innovation is a creative brainstorm of feature ideas, a framework gives a level of transparency of the process, and gives context to why certain decisions are made. And as an extension of this, if makes it clearer how these stakeholders can make meaningful contributions, other than just forwarding emails containing screenshots of competitor products.

This paper focus on the first two stages of the innovation process. We will be releasing a follow-up paper that describes how we conceive, design and validate solutions to the problems we have prioritised in the first stages. Keep checking the Just Eat Technology blog for news of its release.

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