Ipsos MORI

INDEX DESIGN
The Pursuit of (Consumer) Happiness

Think about a search engine. People are using it every day and generating a huge amount of data. It's possible to establish who they are, what they search, when they search, and what their favourite memes are.

BUT, ARE THEY SATISFIED?

As KPIs go satisfaction is reasonably illusive. Not only is satisfaction objective, but it's also difficult to trust your customer's responses. This might be because your customers are deceiving you, but it's more likely that they just don't spend a great deal of time thinking about whether they are satisfied by your service. Even if they did, can customers reconcile all the different aspects of a service or product to provide a considered response? This presents a problem as it becomes increasingly important for organisations to understand how customer experience aligns with brand promise.

At Ipsos we have been exploring how best to develop an accurate and robust measure of overall happiness by combining satisfaction scores from different aspects of a product or service. In doing so, we have discovered what we believe to be the optimum overall metric for measuring happiness and helping our clients to manage and track it consistently over time.

DESIGNING A SINGLE METRIC FOR HAPPINESS

Happiness isn't as simple as 'yes' or 'no'. The answer to 'are you happy with this service?' varies from person to person, and is dependent on all the different facets of your service. So, it's useful to start with these core questions:

- Who are the customers?

- What type of research is appropriate for understanding what they think and how they feel?

- What is our definition of customer happiness, and how should this be tracked and acted upon?

A survey can contain several metrics related to meeting the needs of consumers and/or just one overall question. For our approach, we designed an overall happiness metric using satisfaction with different product aspects.

Revisiting the search engine metaphor, for us to establish whether our customers are happy with their search engine provider we must identify the survey questions that allow us to create a baseline satisfaction score for the service and understand what drives this overall metric. Our overall satisfaction score is a composite score to questions such as: would you recommend the service, do you find the service easy to use, how often do you use the service, etc.
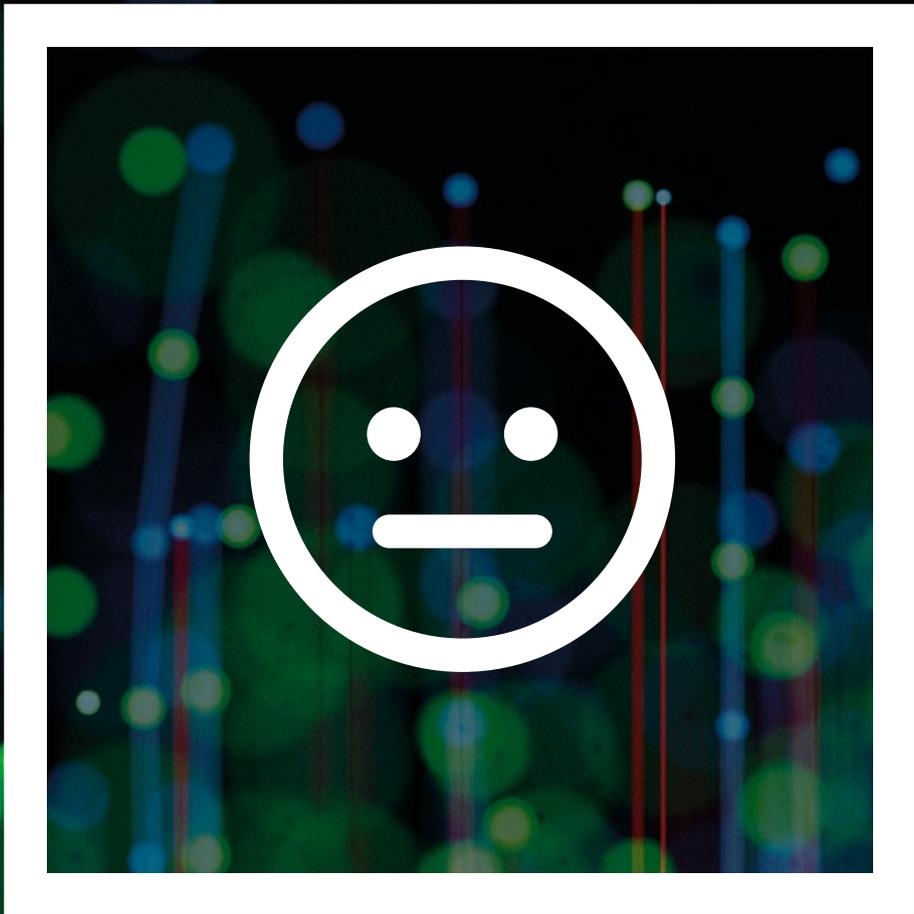
"WE MUST IDENTIFY THE SURVEY QUESTIONS THAT ALLOW US TO CREATE A BASELINE SATISFACTION SCORE"

GROUPING SURVEY MEASURES TO FIND UNDERLYING HAPPINESS THEMES USING FACTOR ANALYSIS

So, how does grouping survey measures work in practice? We start by using factor analysis, a statistical technique broadly used to examine the pattern of correlations between statements. Factor analysis simplifies the data by grouping the questions into themes or factors based on the similarity of responses given to them.

Attributes that are highly correlated are likely to be influenced by the same underlying theme. Reducing the number of attributes gives us a more manageable number of representative factors. With a reduced and summarised number of aspects we could focus on the core question at hand.

For our search engine, we could arrange the 45 satisfaction attributes that we identified into 8 factors:

Factor 1
Customer interaction with the product/service
Factor 2
Product/service development
Factor 3
Product/service testing
Factor 4
User engagement with the product/service
Factor 5
User performance analytics
Factor 6
User experience and management
Factor 7
Business & operational support
Factor 8
Overall Happiness Index

The last factor is used as the new Overall Happiness Index and is comprised of key product performance

attributes, generally linked to product performance and revenue generated. These attributes summarise, and help to define, the main areas of satisfaction.

CHECKING CONSISTENCY WITH RELIABILITY TESTS

After running the factor analysis, we carry out reliability tests on each factor to assess the degree of consistency among the attributes forming each underlying theme. The rationale is that all the individual variables should be measuring the same construct and thus be highly interrelated. For instance, all the variables included in our 'Factor 4: user engagement with the product/service' should relate to how a consumer interacts with the service. If we have factors with more than 10 variables, this technique helps us to remove the less significant.

The reliability coefficient used to assess the consistency of the entire scale is Cronbach's alpha. Cronbach's alpha coefficients range from 0 to 1 and the generally agreed lower limit for Cronbach's alpha is 0.6 in exploratory research. The closer to 1, the better.

In our analysis, the Cronbach's alpha coefficients were higher than 0.7 for all factors, and for the Overall Happiness Index, it was higher than 0.85, leading us to feel confident that we'd identified the right macro areas.

ESTABLISHING WHICH MEASURES ARE IMPACTING ON THE NEW SATISFACTION INDEX THROUGH DRIVER ANALYSIS

Driver analysis is a technique for understanding which measures, factors, or attributes have the greatest influence on a specific variable. The analysis can be based on statistical measures of the relationship between each attribute, or factors, and an overall measure of the market performance.

POWERFUL WAY TO DERIVE BUSINESS VALUE

This is a powerful way to derive business value from different types of survey data. Also, driver analysis can tell us which resource allocation will have the greatest impact on the new Overall Happiness Index.

For our search engine provider, we can establish not only whether their customer base is satisfied, but also what aspect of the service has the greatest impact on the customer's satisfaction. These actionable insights allow the client to focus their efforts on the areas with the highest returns. For instance, if customer service and product development had the highest potential impact on overall happiness then these would become the main areas of focus to optimise satisfaction.
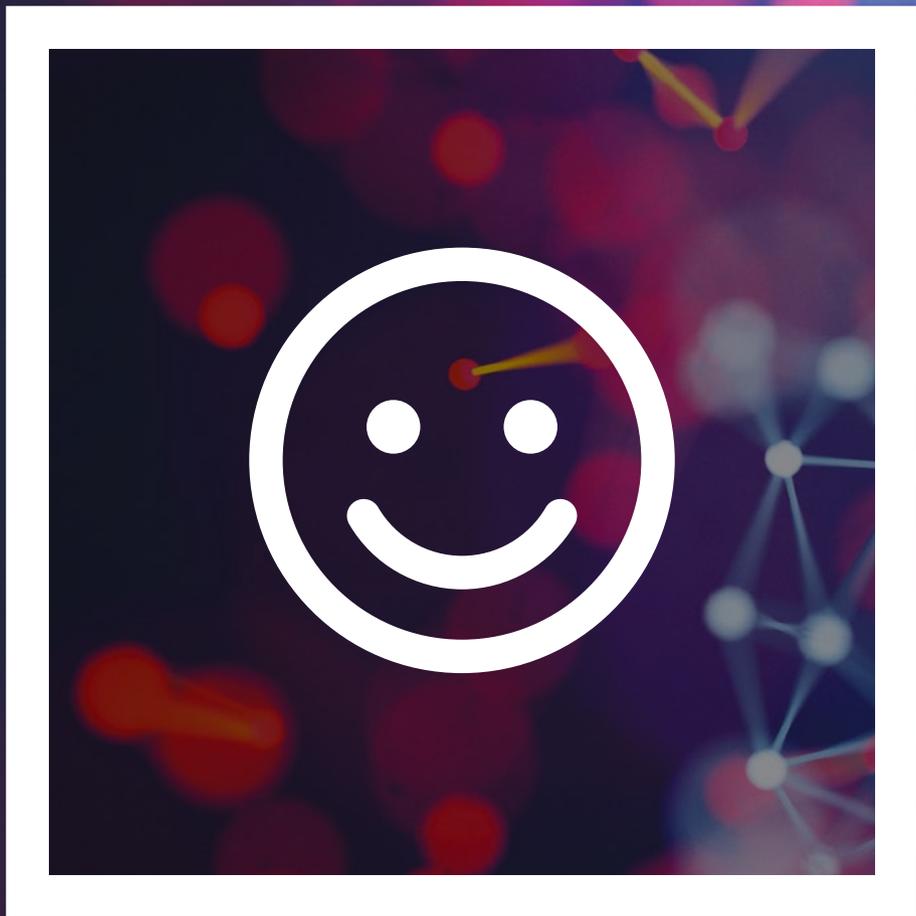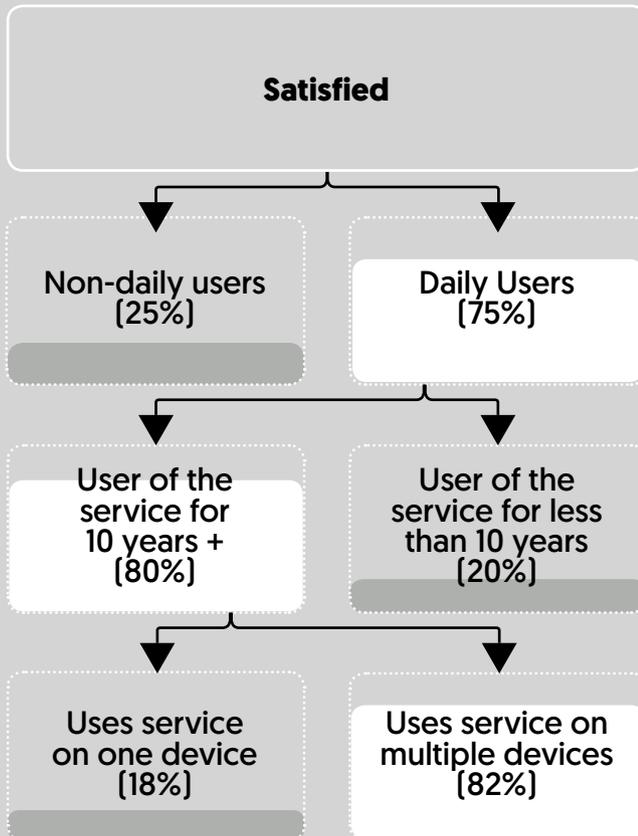
CHAID analysis is the most common type of decision tree analysis, and is used to better understand how different variables influence, predict, and profile an outcome. One of the main advantages of this technique is that its output is highly visual and easy to interpret.

PROFILING THE SATISFIED GROUP

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                    ┌─────────────────┐
                    │    Satisfied    │
                    └─────────────────┘
                       │           │
          ┌────────────┘           └────────────┐
          ▼                                     ▼
┌──────────────────┐              ┌──────────────────┐
│ Non-daily users  │              │   Daily Users    │
│      (25%)       │              │      (75%)       │
└──────────────────┘              └──────────────────┘
                                     │           │
                        ┌────────────┘           └────────────┐
                        ▼                                     ▼
              ┌──────────────────┐              ┌──────────────────┐
              │  User of the     │              │  User of the     │
              │  service for     │              │ service for less │
              │  10 years +      │              │  than 10 years   │
              │      (80%)       │              │      (20%)       │
              └──────────────────┘              └──────────────────┘
                 │           │
    ┌────────────┘           └────────────┐
    ▼                                     ▼
┌──────────────────┐              ┌──────────────────┐
│   Uses service   │              │  Uses service on │
│  on one device   │              │ multiple devices │
│      (18%)       │              │      (82%)       │
└──────────────────┘              └──────────────────┘
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This technique looks for distinct groups within a sample which, according to their responses, will predict or profile the variable of interest: the satisfied vs. dissatisfied. It's a powerful technique for profiling because we can use any sort of variables in the tree.

In interpreting this output, we can establish that those satisfied with the service are more likely to be daily users. They have been using the service for 10+ years. Other variables which we identified as having an impact on overall happiness are the number of devices that a user interacted with the service on. Those who used the service on multiple devices tend to be happier than those restricted to one device.

By developing a more accurate picture of both groups our client was better able to target improvements.

BUT, I DON'T RUN A SEARCH ENGINE: A HOLISTIC OVERVIEW OF HAPPINESS

This technique is not limited by service, product, or KPI. Any KPI can be measured, allowing for tailored results depending on which KPIs are most relevant for your business or product offering. For instance, if you run a hotel you could use this technique to question how likely a customer is to recommend your service, or if you're a TV provider you might like to profile those that think TV is essential to their lives.
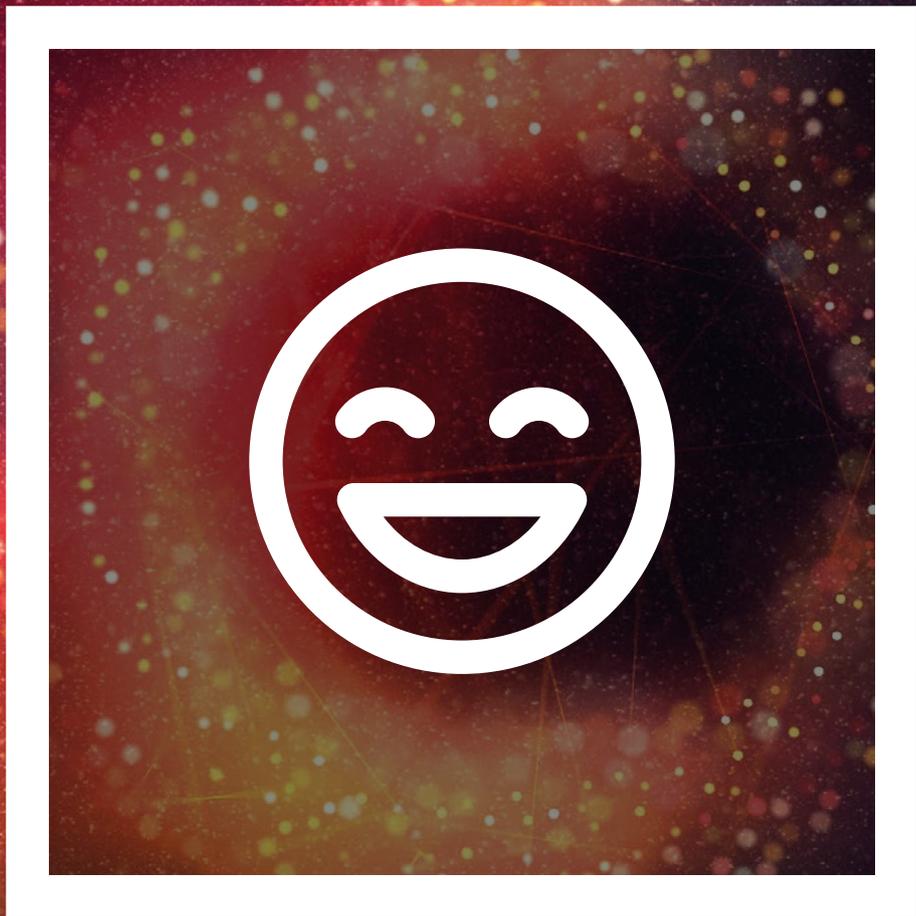
"INDEX DESIGN CAN ALLOW YOU TO BETTER UNDERSTAND THE KPIs THAT MATTER TO YOUR BUSINESS"

The approach that we have developed does not rely on one single question, but instead pulls together a holistic overview of a KPI, which for our search engine is overall general happiness. This detailed approach gives us a comprehensive review of a KPI and highlights specific areas where clients could not only identify the success of their performance, but also how they could improve. Actions in these areas for improvement would ultimately help to increase the KPI score. The approach also allowed our client to understand areas that would help further drive positive experience among those who were already positive.

Index design can allow you to better understand the KPIs that matter to your business. This technique gives you robust insights about your customers, allowing you to drive loyalty amongst satisfied users and make tangible improvements for those who are dissatisfied. Ultimately, reducing costs, increasing ROI, and delivering that elusive consumer happiness. ●

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Nick is one of our digital experts within Ipsos Connect. He is particularly interested in innovation and new research techniques to gain a deeper understanding of consumer behaviours and he is currently working on several initiatives testing virtual reality, biometrics, and mobile passive measurement.

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ABOUT IPSOS MORI

Ipsos MORI, part of the Ipsos group, is one of the UK's largest and most innovative research agencies, working for a wide range of global businesses, the FTSE100 and many government departments and public bodies.

We specialise in solving a range of challenges for our clients, whether related to business, consumers, brands or society. In the field of data science, we have a large and diverse team of experts including mathematicians, statisticians, data scientists and behavioural economists. We are constantly seeking to break new ground in the understanding and application of large and complex data sets.

We are passionately curious about people, markets, brands and society. We deliver information and analysis that makes our complex world easier and faster to navigate and inspires our clients to make smarter decisions.