

How to Structure Qualitative Data to

Discover Patterns and Improve Product Strategy



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Introduction

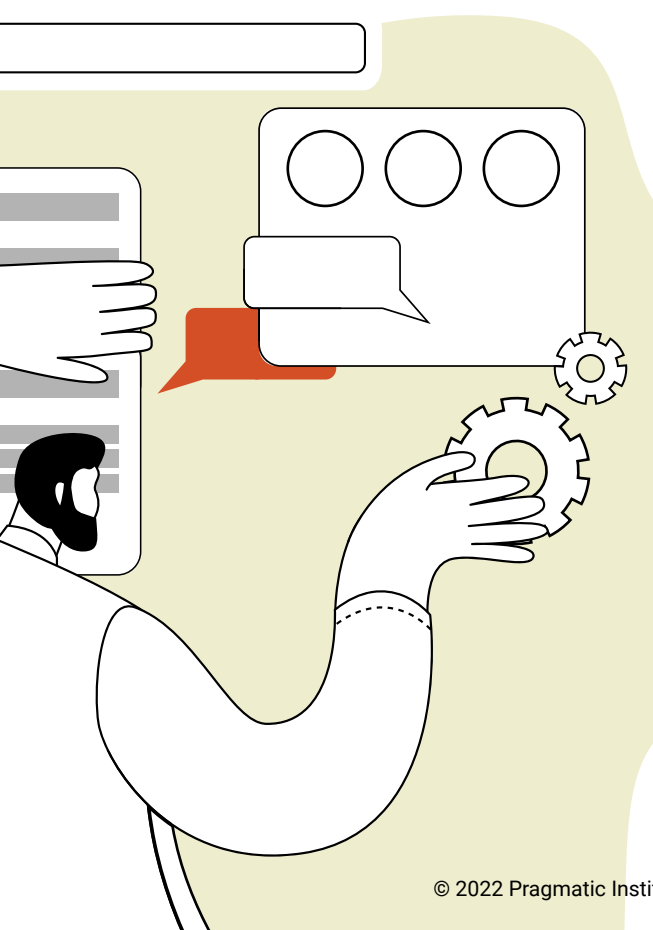
Data plays a powerful role in all of our product practices, from finding the right markets to serve to how to retain existing customers. The challenge is how do we extract meaning from our data?

For context, at Pragmatic Institute, we define data as facts and statistics collected *for reference or analysis*.

And we emphasize “for reference or analysis” because there is no inherent value in collected data. The value must be extracted.

Since *the primary focus of data is to gain a better understanding of the market*, insights and, subsequently, value are found when data uncovers intent, goals and behaviors in the market.

Different types of data will uncover different market insights. For example, qualitative data is ideal for understanding the “why” behind consumer behavior and quantitative data is best for understanding the “how.”

An illustration on the left side of the page shows a person's head and shoulders in profile, looking at a computer screen. The screen displays a bar chart. The person's hand is reaching out towards a gear. There are several other gears and a speech bubble icon on the screen. The background is a light green shape.

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What is Quantitative Data?

Data that seeks to capture the breadth of behaviors and goals of our business and market.

Sources of Quantitative Data

*These are just a few examples and do not represent a complete list of possible quantitative data inputs.

- Sales
- Customer acquisition cost
- Click-through rate
- Daily/Monthly average users
- Net promoter score
- Lifetime value
- Monthly/annual recurring revenue
- Website traffic
- Social media followers/engagement
- Close-ended survey questions

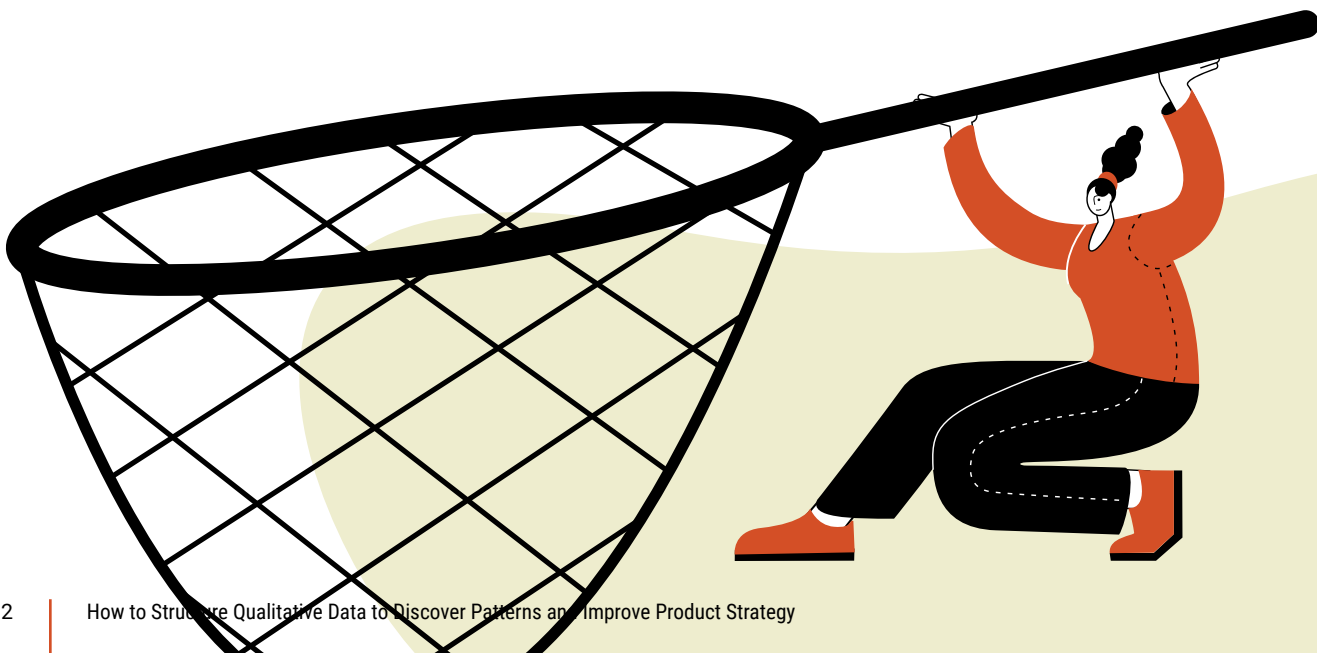
Benefits of Quantitative Data

There is no shortage of quantitative data, which means it's easier to gather and uncover patterns. Capturing the data can also be automated and sorted into dashboards making it easy to digest and review on a regular basis.

Challenges of Quantitative Data

The quantity is absolutely an advantage, but it's also easier to get distracted with information that doesn't add value (noise) or simply feel overwhelmed by the volume. Additionally, inconsistent collection methods could create information that isn't dependable.

Furthermore, privacy is a growing concern in every industry, so you have to be thoughtful about your collection and protection of data. Finally, cleaning and organizing data can be costly and time-consuming.



What is Qualitative Data?

Human-centered data that seeks to understand the intent and goals of your business and your market.

Sources of Qualitative Data

- Interviews
- Reviews
- Customers using your products
- Competitors customers
- Recent wins
- Recent losses
- Focus Groups
- Open-Ended Survey Questions
- Observing Customer Behaviors

Benefits of Qualitative Data

This type of data is excellent at capturing intent. Even a few in-depth conversations can help you uncover why a problem is urgent. It can be the key to the outside-in perspective.

Qualitative data also helps product teams engage with the quiet 80%, which are those individuals who aren't posting their reviews or emailing the company with their comments and suggestions.

It can uncover new opportunities in ways quantitative cannot through simple conversation. Finally, it reminds us that the people who purchase our products are people, and we can learn how to be more authentic in the relationship.

Challenges of Qualitative Data

There are many reasons product professionals might not invest time in capturing this type of data.

First, quantitative data is time-consuming. It's also hard to get schedules to align with customers if you're trying to conduct focus groups or one-on-one interviews

Additionally, storing this type of unstructured data can be a daunting task. Finally, many product professionals who do take the time to collect this data struggle to uncover clear patterns.



What's So Important About Patterns?

Individual interactions are interesting no doubt, but patterns uncover powerful insights.

For example, maybe one person found it hard to complete their purchase when they decided to buy your product. They share with you that it took several attempts to get the final page to load and that they had to enter their credit card information multiple times. The reason behind that challenge could be multiple variables including problems with their personal computer, a weak internet connection, or specific firewalls installed by their company (which is where they were when they tried to complete a transition).

However, if several people say they had the same experience. It might be worth exploring if there is a problem with the webpage, the online cart, or the payment processing software.

Patterns go far beyond understanding customer problems. It could also help you uncover why you lost several sales to a specific competitor or why the development of a new feature could be a promising way to increase revenue.

It can be easy to spot patterns in quantitative data by using visualization strategies. Maybe you discover that your company makes the most sales in February of each year compared to other months. A simple bar chart showing sales for each month could help uncover that pattern. Then you can do the work of determining what patterns matter and what are simply noise.

Qualitative data is challenging because it is unstructured. So before you can uncover any patterns you have to create a structure where there is none.

This ebook is going to teach you a methodology for structuring qualitative data to uncover patterns and deliver value to your stakeholders.

Structure Begins with the Qualitative Encoding Process

The encoding process typically includes three key elements:

1. Group statements into **themes**. These are high-level representations of the categories. (Examples: Pricing, Technical Support, Etc.)
2. Identify sentiment by categorizing the emotion (positive, negative or neutral) (Example: We'd categorize the following statement as negative: "The time it took to respond to my problem was too long.")
3. Tag concepts inside the themes. (Example: #VolumeStrategy, #SlowResponse, #Reputation)

Inductive and Deductive Qualitative Encoding

There are two common approaches to encoding: deductive and inductive. Neither approach is better than the other, and it's possible you end up using a combination.

Deductive encoding means that you are trying to sort qualitative data into predetermined themes and tags. This might happen if your team has developed a system and this approach ensures consistency. It's also possible you've already worked with qualitative data in previous projects, and you're using the same approach.

Inductive encoding means you derive codes from the data. In this approach, you allow the themes and tags to emerge from the content. This is the ideal option if it's your first qualitative data project or if the data set is unique (like a new target audience).

It's possible that you could have a deductive approach in mind, but during the course of the project, you build new themes and tags (inductive approach) because they are outside the scope of the predetermined categories.



Semi-structured interviews speed up the encoding process.

Structured Interviews vs Unstructured Interviews

Qualitative data is more than just interviews. It can be gathered from reviews, case studies, focus groups and customer observations.

However, more often than not, qualitative data will involve transcripts from interviewing a variety of audiences including current and past customers, competitors customers, prospects, etc.

So, it's important to have a quick discussion on interviewing strategies. There are typically two types of interviewing preferences. The first is someone who likes to "go with the flow" by letting the conversation naturally unfold. Their concern is that a highly-structured conversation will be inauthentic and produce rote responses. As a result, the answers will lack a certain flavor that inspires insights that lead to valuable innovation.

The second is someone who creates a detailed script for each interview. Their concern is without the script the conversation will lack the quality that can only be found through consistency.

What if we said they're both right? One effective strategy to ensure a highly-structured but natural conversation is by utilizing a question library. The best part is with enough possible questions, each interview becomes a choose your own adventure. But, most importantly, it can remain consistent from interview to interview.

So rather than five consecutive questions, it becomes four or five guiding questions with the freedom for follow-up.

The reason we recommend semi-structured interviews is that structure speeds up the encoding process. Certain questions are designed to uncover insights for specific themes and tags.

Let's Practice

You're now a product manager for a meditation app that encourages and teaches people to meditate. Because of its popularity, there are several comparison videos on YouTube. The host for each video describes their impression of your product, and now you want to see if there are any patterns in these unprompted but in-depth reviews.

INSTRUCTIONS:

The highlighted statements have been preselected for you. In the table on page 7, use the drop down in the sentiment column to decide/select whether the statement is positive, negative or neutral. In the next set of columns, identify an appropriate theme for the sentiment, followed by a related tag (hint: it's okay to input multiple tags).

We've completed the first row to get you started. If you'd like to see how we've encoded the reviews, click and hold the green dot at the bottom of this page.



Review 1

"You want to start with the basics and there is an instructor who is excellent at teaching meditation, so that's a huge plus. The basics courses are great, but it's not really clear where you should go next after you finish them. There are a bunch of other courses and a bunch of other teachers, but the order isn't clear. Because there are so many different teachers, you'll probably find someone you like and relate to. The app doesn't have a lot of techniques. There is a basic meditation timer. The app also gives you some basic statistics and reminders to help you build a habit. The features aren't as advanced as some other apps. The last feature that is unique is actual meditation coaches that are reachable in the app."

Review 2

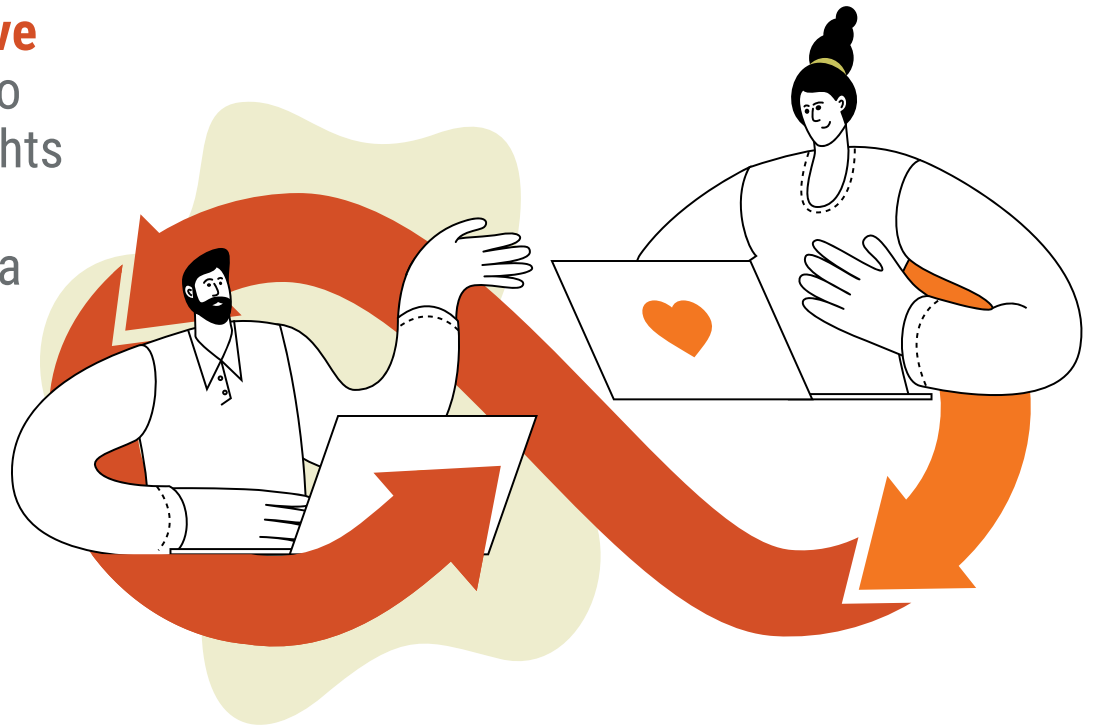
"The courses are definitely the highlight of the app. This app does an excellent job choosing world-class meditation teachers. The combination of video and audio content makes the app engaging. There are also talks in the app that are very podcast-like. While there is a lot of wisdom here, it's very hit or miss. While some are powerful, others feel somewhat contrived. Users can actually connect with meditation coaches, which is unique. The main drawback is the price. It is \$99 a year, which is more expensive than other apps. However, I've found other options come nowhere near the same quality."

Review 3

"I think this is the best-curated app. They have expert instructors who are legends in the space. This is an excellent app for beginners. This app has lots of videos with narratives that pull you in. The courses are well-produced and there is a large selection. If you're looking for more advanced stuff, there might be better apps for you."

| QUOTE | SENTIMENT | THEME | TAGS |
|--|-----------|---------|--------------|
| You want to start with the basics and there is an instructor who is excellent at teaching meditation, so that's a huge plus. | Positive | Courses | #Instructors |
| Because there are so many different teachers, you'll probably find someone you like and relate to. | | | |
| The courses are definitely the highlight of the app. This app does an excellent job choosing world-class meditation teachers. | | | |
| They have expert instructors who are legends in the space. This is an excellent app for beginners. | | | |
| The basics courses are great, but it's not really clear where you should go next after you finish them. There are a bunch of other courses and a bunch of other teachers, but the order isn't clear. | | | |
| The combination of video and audio content makes the app engaging. | | | |
| This app has lots of videos with narratives that pull you in. The courses are well-produced and there is a large selection. | | | |
| The app doesn't have a lot of techniques. There is a basic meditation timer. The app also gives you some basic statistics and reminders to help you build a habit. The features aren't as advanced as some other apps. | | | |
| If you're looking for more advanced stuff, there might be better apps for you. | | | |
| The last feature that is unique is actual meditation coaches that are reachable in the app. | | | |
| Users can actually connect with meditation coaches, which is unique | | | |
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Use **quantitative** data projects to verify the insights gathered from **qualitative** data projects.



Looking for Patterns

In this small example from the last page, we can already uncover patterns. We found two major themes, meditation tools and courses. We also found some tags like instructors, delivery, coaching, and various advanced features.

Some of the insights found in this exercise could be:

- Users are impressed with the caliber of instructors for the courses.
- Users feel the app might lack value for advanced meditators in both features and courses.
- Users find the delivery of the courses to be engaging.
- Users are impressed with the coaching feature in the app.

If we continue finding reviews, we might find new patterns like one for price. Currently, there was only one mention of price, and while interesting, wouldn't qualify as an insight.

Verifying Insights

Insights captured from qualitative data projects can be fuel for quantitative data projects. You can use these new insights to establish a survey or direct what metrics might be valuable to track. Additionally, you can use quantitative data projects to verify the insights gathered from qualitative data projects.

How to Align Your Team

These qualitative data projects can quickly become complex and difficult when you add more people to the work because it is a subjective process.

While you might put one statement under one theme or tag, your colleague might choose a different theme or tag. The best way to overcome this challenge is to have reading sessions.

A reading session is when the product team will work together to encode the qualitative input with themes, sentiments and tags. Then, the group will share and build consensus around the right structure and system.

Additionally, successful qualitative data projects will have adequate storage systems, consistent capturing methods and iterating on the process over time.

When Is a Qualitative Data Project Complete?

As these projects progress, many people ask, “when have I done enough?” The answer isn’t a specific number of interviews, surveys or focus groups. Instead, it’s when you discover meaningful patterns that can inform business decisions. **IP**





Turn Data into Product Strategies

Insight

Pragmatic Institute's newest course, *Insight*, provides you with a grounded and actionable approach to incorporating data into product practices and decisions.

You'll also learn how to use a theme tracker, which will make the qualitative encoding process you learned in the ebook faster and more scalable.

In addition to learning more about discovering trends in qualitative data, you'll also learn how to:

1. Employ a scalable and repeatable process for successful data projects
2. Leverage product skills when partnering with the data team
3. Introduce data to the prioritization and strategy process



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