Building a Customer Journey Graph-Based Recommender System

How well do you know your customers?
What is a Customer Journey Map?
A customer journey map is one valuable tool in a customer experience toolkit. Gartner defines a customer journey map as “A collaborative process of gathering qualitative and quantitative data to understand customers’ journeys and identify gaps between their expectations and their perceptions of the experience delivered by your brand at steps along the journey with a defined beginning and end.” In simple terms, it maps the complete experience with your company and your product.

All of your customers are in the middle of a journey. It might include things like their order history, location, social history, diagnoses, and preferences. Mapping customer journeys helps you understand them on a deeper level to support where they are going.

How well do you know your customers?
Can you predict how they will react in a given situation? Can you customize their path and influence the outcome? How would your business change if you could? With traditional data storage like tables, you can’t easily map individual customer journeys. Connected data improves your understanding of how your data fits together and what it means. GraphGrid’s Connected Data Recommender System connects data with context so you can map customer journeys, predict what they will do, and support and influence their decisions.

New connections mean you gain a deeper understanding of your customers.
The Advantages of Graph-Based Journey Maps

Traditional customer journey maps are useful, but their ability to identify patterns is limited. They can’t quickly reflect changes and don’t easily scale. They hold millions of customer data points but miss critical insights without context.

Here’s an example of how a graph-based journey map helps a fictional coffee shop. Best-Coffee collects customer data through their rewards program touchpoints and connects it with context to all of their other customer data in a graph-based system. They have a regular customer named Jane. Connections created in the graph build a journey map for Jane. It displays Jane’s coffee buying preferences, locations, and her purchase history. Over time, Best-Coffee achieves deeper insights using graph-based connections. Graph-based automation tracks behavior, identifies and highlights patterns, and automatically produces event recommendations and opportunities to influence customer behaviors.

*Why does Jane drink coffee?*

*Does she care about fair-trade and coffee-growing regions?*

*What lifestyle factors affect Jane’s behavior?*

Best-Coffee has a much deeper understanding of Jane. They enhance Jane’s experience in ways the competition cannot. Best-Coffee’s journey map identifies regular patterns of visits and purchases by Jane.

- She visits the East shop three times a week and uses coupons she gets in the mail.
- She prefers fair-trade beans whenever they are available.
When Jane’s habits change, Best-Coffee’s knowledge graph identifies the break in the pattern.

Jane visits the North shop for the first time after not purchasing for several weeks. When Jane scans her rewards card, the barista sees this new behavior. He welcomes Jane, asks if she wants her usual, and asks her what she thinks of the North shop. Jane mentions that she just moved, and this shop is much closer to her new home. The barista offers to update Jane’s mailing address, so she continues to get coupons, and highlights the new fair-trade section they just stocked.

Best-Coffee knows that Jane changed her mailing address. Jane’s previous Best-Coffee branch was in an area full of high-rise offices and apartments. Most of their regular customers were walking between home and work. Jane’s new Best-Coffee location is in a suburban neighborhood surrounded by restaurants and big-box stores. Most customers purchase via the drive-thru. Also, most customers buy more than one beverage at a time. Best-Coffee offers Jane customized coupons. It updates those offers as Jane’s schedule and preferences change (or don’t) in her new location.

Predict Your Customer’s Future

A graph-based customer journey map provides a full picture of your customer’s history. It helps you predict and influence where they are going. It allows you to continue to engage them in the ways they desire going forward. You increase the value of their customer experience and your wallet share.
Influence Customers for Improved Outcomes

If you can predict what your customer will do, understand why they do it, and how they engage your brand in their lifestyle, you have the power to influence their path. That results in the best outcome for the customer and your business. You gain an ability to influence outcomes.

Using Influence Event Selection™, you see your customer’s most likely path and their preferred path. You know what events are most likely to set your customer on the preferred path. Best-Coffee sends Jane offers and information to make her experience at the North shop faster and easier. They inform her of available perks like ordering ahead and paying through the mobile app. They suggest how Jane might adjust her schedule by a few minutes to shorten wait times at the drive-thru. The graph-based Influence Event Selector™ knows that customers like Jane will purchase 40% more with “buddy perks” rewards. Customers take turns picking up coffee for their friends, share the rewards points, and get access to special promotions. Jane's Best-Coffee barista mentions the program at her next visit. Jane signs up. Within a few weeks, Jane's buying habits change. She used to purchase one beverage at a time. Now she picks up two or more coffees at a time. Jane gets more reward perks, and Best-Coffee receives more business from Jane and Jane's friends.
Graph-Based Systems Give Your Business an Advantage

Using a graph-based recommender system, you get the power of AI/machine learning combined with the graph’s best features. It gives you unparalleled flexibility, efficiency, and advantage. Traditional predictor systems use historical training data and can’t adapt to a new situation, like the one presented by Covid-19. With a graph-based recommender system, you can immediately adjust to conditions outside of your control. Graph’s efficiencies and automation free up valuable human resources to focus on other elements of the business.

Suddenly, Best-Coffee has no walk-in customers due to a Covid-19 shutdown, but drive-thru’s remain open. A Best-Coffee manager updates the cafe and drive-thru hours, and the graph-based system updates instantly without the learning time required by a traditional predictor. Your business gains speed and agility, giving you an edge.

You know your customers, and you seek to provide them with the best service. With data stored in traditional systems like tables, your business can only utilize about 10% of the value your data holds.

GraphGrid’s Recommender System connects all of your customer data with context.

It gives you a full understanding of your customers and their journeys. You understand your customer’s history and predict what actions they will take in the future. You influence those actions to improve outcomes that will enhance their experience and your business.

About GraphGrid

With data stored in tables, you can only utilize a fraction of its value. The GraphGrid Connected Data Platform connects data in context. Connected data unlocks new insights, reduces analysis time, makes data accessible to both humans and AI, and improves your decision-making. You already have the data—we believe you should be able to utilize more than a fraction of it.
Get a Tailored Demo of GraphGrid

During a demo tailored to your industry, we’ll demonstrate the power of data in context. You’ll learn how GraphGrid integrates with your existing systems and the new insights it can unlock.

SCHEDULE A DEMO