



# How to create a realistic customer journey map



Mark S. Rosenbaum<sup>a,\*</sup>, Mauricio Losada Otalora<sup>b</sup>,  
Germán Contreras Ramírez<sup>b</sup>

<sup>a</sup> College of Business, Northern Illinois University, 740 Garden Road, DeKalb, IL 60115, U.S.A.

<sup>b</sup> School of Management, Externado University, Bogotá, Colombia

## KEYWORDS

Mall management;  
Customer journey  
mapping;  
Customer decision  
journey;  
Empathy map;  
Customer touchpoints;  
Strategic innovation

**Abstract** Although many articles discuss customer journey mapping (CJM), both academics and practitioners still question the best ways to model the consumer decision journey. We contend that most customer journey maps are critically flawed. They assume all customers of a particular organization experience the same organizational touchpoints and view these touchpoints as equally important. Furthermore, management lacks an understanding of how to use CJM as a cross-functional, strategic tool that promotes service innovation. This article proposes a solution to the unwieldy complexity of CJM by linking customer research to the CJM process and by showing managers how to develop a customer journey map that improves a customer's experience at each touchpoint. Using the case of an actual retail mall, we show that common CJM assumptions about the equal importance of all touchpoints are fundamentally wrong, and how easy it is for retail managers and strategic planners to make incorrect judgements about customer experience. This article demonstrates through a case study how customer research helped a mall's strategic management team understand which touchpoints were more or less critical to customer experience. It also shows key strategic initiatives at each touchpoint, resulting in cross-functional input aimed to advance service innovation at the mall.

© 2016 Kelley School of Business, Indiana University. Published by Elsevier Inc. All rights reserved.

## 1. The customer journey map confusion

Customer journey mapping (CJM) is an increasingly popular strategic management tool praised by both academics and practitioners for its usefulness in understanding an organization's customer experience. Although academic and managerial literature

\* Corresponding author

E-mail addresses: [mrosenbaum@niu.edu](mailto:mrosenbaum@niu.edu) (M.S. Rosenbaum),  
[mauricio.losada@uexternado.edu.co](mailto:mauricio.losada@uexternado.edu.co) (M.L. Otalora),  
[german.contreras@uexternado.edu.co](mailto:german.contreras@uexternado.edu.co) (G.C. Ramirez)

is replete with CJM articles and many service organizations employ the process, confusion still exists as to how best create a customer journey map. Indeed, the [Marketing Science Institute \(2014\)](#) identifies research that addresses the best ways to model the customer decision journey process as a major research priority for practitioners and academics alike.

This article clarifies the confusion surrounding CJM by putting forth a method that blends consumer feedback and research into the CJM process, using an actual retail mall as an example. We show how organizations can create and implement realistic customer journey maps. These maps are integral to understanding customer experience and to maximizing CJM as a strategic management tool for service innovation.

## 2. Understanding the CJM process

The fundamental idea behind CJM is relatively simple; it is a visual depiction of the sequence of events through which customers may interact with a service organization during an entire purchase process. CJM lists all possible organizational touchpoints customers may encounter during the service exchange process. By clearly understanding customer touchpoints, senior management can work with cross-functional team members to employ tactics that foster service innovation. The goal of these tactics is to enhance customer service provider interactions by improving the customer experience associated with each touchpoint.

Touchpoints are typically depicted horizontally on customer journey maps in accordance with a process timeline. The timeline is then separated into three periods: pre-service, service, and post-service. The pre-service period refers to the customer experience before an actual service begins. In the CJM process for a mall, pre-service customer experience may include touchpoints such as seeing mall advertisements, listening to a radio advertisement, or receiving an e-mail solicitation. The service period refers to touchpoints that customers experience during an actual service: entering the mall's parking lot, engaging with employees, visiting stores, and interacting with mall kiosks. The post-service period refers to the customer experience that takes place after the actual service. Touchpoints in this period may include a customer posting a picture of a purchased item on Facebook, returning merchandise, or receiving an incentive to return to the mall.

After identifying all the customer touchpoints in the three periods, managers should develop

strategic categories along the vertical axis that depict relevant strategic initiatives associated with each touchpoint. While the horizontal axis in CJM is relatively easy to comprehend, developing the vertical axis can be significantly more complex. The effectiveness of a customer journey map as an innovation tool depends on the vertical axis.

Some CJM pundits dismiss the importance of the vertical axis altogether and focus on CJM solely as a graphical representation of a customer's touchpoints with an organization. Although this visualization technique may aid managerial understanding of customer experience, it leaves management with a deficient tool that is essentially useless in helping to promote innovation within a service system. Other CJM pundits encourage managers to develop the vertical axis as an emotional journey of customer thoughts, beliefs, feelings, and emotions that cannot be observed directly ([Lingqvist, Plotkin, & Stanley, 2015](#)). This emotional emphasis transforms CJM into a very specific management tool—namely, an empathy mapping exercise ([Tschimmel, 2012](#)). Although an empathy map represents a useful service design tool, its ability to help managers understand the complexity and interdependence inherent within service systems is extremely limiting. Finally, other CJM advocates view the vertical axis as a managerial hodgepodge—essentially a space in which managers can plan a myriad of activities, including design opportunities, customer objectives, employee tasks, branding opportunities, and omnichannel retailing opportunities ([Court, Elzinga, Mulder, & Vetvik, 2009](#); [Dasu & Chase, 2010](#); [Skinner, 2010](#)). The issue here is that as a customer journey map expands vertically and becomes more complex, the confusion surrounding it may also increase. Managers should regard the vertical axis of a customer journey map as specifying the key components of the entire service system, showing how marketing, human resources, operations, and information technology can work together to meet customer expectations at every touchpoint. By doing so, the CJM process is inherently linked to the service blueprinting process, another service innovation tool ([Bitner, Ostrom, & Morgan, 2008](#)).

## 3. A realistic customer journey map that fosters innovation

Three major factors may limit managers from fully employing CJM for service innovation and improvement. First, although scholars have constructed CJM from a theoretical perspective ([Clarke, 2014](#)), studies offering real examples and instructions for managerial interpretation remain scarce. Second, an

unspoken assumption in CJM is that all customers experience each horizontal touchpoint and that each touchpoint is equally important from the customer perspective. Thus, customer journey maps for complex services with many touchpoints may be difficult to create and understand. Third, managers may become disillusioned with the CJM process because they lack an understanding of how the vertical axis illustrates cross-functional interdependencies of a service system at each touchpoint. We address these limitations with an actual CJM example.

### 3.1. Developing the horizontal axis with customer research

Our study focused on one of the world's largest indoor shopping malls, referred to in this article as Highland Park Mall (HPM). HPM offers customers a diverse range of shopping, entertainment, and food/beverage options. It operates its own website, actively participates in social media, and uses online and in-store promotions. In addition, the mall is active in building community relations by serving as an event venue for many community groups.

We began the CJM process by meeting with HPM's management team to identify the touchpoints customers might experience during a trip to the mall; these touchpoints were diagrammed on the horizontal axis. The touchpoints were categorized into three periods: those that transpire before,

during, and after service. This activity resulted in the identification of 60 customer touchpoints, each illustrating a moment when customers have a point of interaction in the mall. Of these, 37 (i.e., 62%) represented pre-service touchpoints, 14 (i.e., 23%) represented service touchpoints, and 9 (i.e., 15%) represented post-service touchpoints.

As we previously discussed, a limitation of the CJM process is the common underlying assumption that each customer touchpoint is equally important in the planning process and thus should be managed with the same level of importance. To address this limitation, we linked marketing research to the CJM process. We obtained customer response data through self-administered questionnaires that were randomly distributed to 100 customers in various parts of the mall. Of the respondents, 75 were women and 25 were men; their ages ranged from 18 to 75 years. The respondents represented a convenience sample of mall customers who volunteered to take part in the study, and each respondent received a small monetary incentive from the mall for their time. We asked the respondents to complete a questionnaire on whether they had engaged in each of the 60 identified touchpoints that day (0 = no, 1 = yes). Based on these responses we worked with senior management to select the top 10 touchpoints, which are depicted in Table 1.

Table 1 illustrates the percentage of mall customers who reported experiencing each touchpoint; in doing so, the table dispels the assumption that all

**Table 1. HPM's key horizontal axis customer touchpoints**

	(% yes)
<b>Pre-service period</b>	
Before you decided to travel to Highland Park Mall (HPM) today, did you. . .	
1. Visit HPM in the past?	89
2. Talk to others about HPM?	72
3. See an advertisement on a street or highway billboard about products, services, or brands that are available at HPM?	74
<b>Service period</b>	
While you were in HPM today, did you. . .	
4. Use the parking lot?	75
5. Plan on taking advantage of advertised in-store incentives or coupons?	49
6. See special prices or discounts that you discovered while shopping in a store?	48
7. Receive comments from others that were shopping with you?	46
<b>Post-service period</b>	
After you made your purchase today at the mall, do you plan to engage in the following activity?	
8. Recommend a store that is located in HPM to others?	95
9. Talk to friends or family about today's purchase or activities?	85
10. Plan on returning to HPM in the very near future?	92

touchpoints are equally important from a strategic management perspective. That is, not every touchpoint was truly experienced by every respondent, with results ranging in the top 10 touchpoints from 95% (“Recommend a store that is located in HPM to others”) to 46% (“Receive comments from others that were shopping with you”). It is worth noting that while management had originally devised 60 customer touchpoints, less than 50% of mall shoppers had experienced even 50 of them. The traditional disconnect between the CJM process and marketing research results in customer journey maps that overestimate the number of strategic touchpoints most customers experience. This inadvertently causes managers to become overwhelmed by the concept of ‘experiential marketing,’ as depicted in a complex customer journey map.

### 3.2. Developing the vertical axis for service innovation

We developed the vertical axis of the customer journey map by focusing on managerial practices that, when used together, help ensure mall customers experience each touchpoint in a satisfactory manner. The vertical axis should also depict managerial cross-functional actions within a service system that are inextricably linked to the touchpoints, as doing so connects the CJM process with service blueprinting and service innovation. For HPM, we defined the vertical axis and the department responsible for strategic management regarding the particular customer touchpoint.

- *Mall shopper requirements:* Specify the mall shopper (customer) requirements that are required at the touchpoint (marketing).
- *Employee actions:* Specify the mall employee actions that are required at the touchpoint to meet the customer requirement (human resources).
- *Employee support:* Specify training, information technology, licenses, certification, tools, materials, and so forth that mall employees need in order to meet the requirement at the touchpoint (human resources and operations management).
- *Mall design:* Specify the environmental stimuli that customers should both sense and not sense at each touchpoint to help them judge service quality (marketing, operations management, building engineering).
- *Service innovation:* Brainstorm how all departments can work together at each touchpoint to

improve the customer experience (all departments). Consider eliminating potential service failures and customer ‘pain points’ at the touchpoint.

## 4. Lessons learned: A practical guide to CJM

Table 2 presents HPM’s customer journey map for its pre-service period. The key customer touchpoints during this period are a mall shopper’s previous visits to the mall, conversations about the mall with others, and experience with advertising stimuli (e.g., seeing a highway billboard on the way to the mall). When HPM realized the importance of these three pre-service touchpoints, it planned strategic initiatives at each one and implemented service innovation strategies to improve shopper experience. For example, given the importance of a shopper’s past experience in encouraging future behavior, HPM decided to station customer ambassadors at each mall entrance to encourage shoppers to provide feedback and to enter into a raffle by checking in on social media or using the mall’s hashtag. In addition, because research showed that the majority of mall shoppers noticed the mall’s highway billboards on their way to the mall, management worked with a third-party specialist to improve signage by implementing three-dimensional billboards that feature moving parts (e.g., a mall shopping bag).

Table 3 presents four major customer touchpoints that occur during the service period. These touchpoints include mall shoppers using the parking lot, using coupons (obtained before the visit), using in-store incentives and discounts, and receiving comments from others during shopping. This information led mall management to implement a real-time parking lot technology system that counted spaces available in the lot for customers. In addition, because many shoppers responded to incentives during the pre-service and service periods, the mall worked with its advertising agency and retail tenants to ensure a consistent branding strategy for the mall logo. Next, the mall implemented free wi-fi throughout the mall to encourage shopper communication and integrated real-time promotions with its mobile application and Facebook page.

Table 4 presents three major touchpoints that transpire after a shopper leaves the mall: recommending a particular store, talking to others about purchases, and planning a return trip to the mall. During the CJM process, HPM management discovered the importance of shopper communication about the mall to others. In response, they launched online initiatives that encouraged shoppers to share experiences and recommendations on the mall’s

**Table 2. The HPM customer journey map: Pre-service**

		Touchpoint		
		Visit HPM in the past	Talk to others about the mall	See highway billboard
<b>Strategic Action</b>	<b>Mall shopper requirements</b>	To have the same experience as the prior visit.	To have a positive attitude about shopping at the mall.	Advertisements must be visually appealing. Advertisements must be current and creative.
	<b>Employee actions</b>	Station employee customer ambassadors at informational desks near every mall entrance/exit. Ensure that mall shoppers are satisfied during and after their shopping trip.	Mall’s marketing manager actively works with advertising agency to promote the mall’s impact in the area. Emphasize the mall’s impact in local media (employment, sales).	Mall’s marketing manager works with advertising agency to plan mall billboard strategy along major highways. The mall also works with retail tenants on co-op advertising opportunities.
	<b>Employee support</b>	Customer ambassadors receiving training on service quality, active listening, problem resolution, and mall policies.	The mall’s advertising agency and public relations agency create and distribute press release packets. The mall and firms actively work with community organizations and local government officials.	The mall’s marketing manager and advertising work with a third party that specializes in billboard advertising.
	<b>Mall design</b>	Attractive help desks that encourage shoppers to provide the customer ambassadors with feedback. Customer ambassadors wear a uniform with the mall’s logo.	Published articles, advertisements, social network posts (Facebook, Instagram, Pinterest, Twitter), customer reviews (TripAdvisor, Google) should be positive.	Mall shoppers respond to the large-format advertising structures located on major highways that direct automobiles and public transportation to the mall.
	<b>Service innovation</b>	Use raffles to encourage mall shoppers to complete satisfaction, “check in” on social media, and use the mall hashtag.	The mall’s social media director is responsible for social media, email and mobile marketing, and for social media monitoring with software.	Command mall shoppers’ attention with new three-dimensional billboard designs and moving parts (e.g., shopping bag with mall logo).

interactive blog and in its online customer forum. To encourage shoppers’ word-of-mouth communication, the mall designated two areas with an interactive mall display that allowed shoppers to post pictures of themselves enjoying their new products or simply enjoying the mall experience.

**5. Conclusion: CJM can be a strategic innovation tool**

The HPM customer journey map offers valuable insight into the mapping process. First, we recommend

that managers resist designing all-inclusive customer journey maps that contain all possible touchpoints, as doing so can result in a highly complex customer journey map that customers may or may not follow. To build a more useful customer journey map, managers need to gather customer information and identify both critical and less important touchpoints. We encourage managers to follow HPM’s approach and directly ask customers which touchpoints they experience when making their journey through a service organization. This approach may be demanding in time and resources at the beginning, but this extra effort will be outweighed by the benefits of the

Table 3. The HPM customer journey map: Service period

		Touchpoint			
		Use the parking lot	Advertised incentives/ coupons	In-store special prices or discounts	Receive comments from others during shopping
<b>Strategic Action</b>	<b>Mall shopper requirements</b>	Ample parking spaces. Clean, safe, well-lit parking lot.	Advertisements must be current and visually creative.	Advertisements must be current and visually creative.	Ease of communication with others, physical and virtual.
	<b>Employee actions</b>	Designate mall employees responsible for parking lot maintenance. Parking lot attendant during mall operating hours maintains customer safety and ensures video monitoring of all cars entering/ exiting the mall.	Mall marketing manager works with retail tenants to obtain promotional strategies six to nine months in advance. Mall marketing manager must approve all co-op advertisements and promotions that feature the mall logo.	Mall marketing manager works with retail tenants to obtain promotional strategies six to nine months in advance. Mall marketing manager must approve all co-op advertisements and promotions that feature the mall logo. Rotate signage frequently.	Mall installs ample seating in common areas throughout the mall. Operations responsible for maintaining complimentary wi-fi throughout the entire mall.
	<b>Employee support</b>	Parking lot attendants are trained on mall safety, video monitoring, and parking management software technology.	Mall marketing manager and advertising agency work together to ensure consistent message across all channels.	Mall marketing manager and advertising agency work together to ensure consistent message across all channels.	Mall cleaning services ensure that seating areas are clean. Operations works with wi-fi technology vendor. Mall management approves seating, tables, and landscaping.
	<b>Mall design</b>	Shoppers respond to mall attendant on arrival, parking tickets, video cameras, lighting fixtures, physical structure, parking lines.	Shoppers respond to the advertisements in paper or virtual format. All co-op advertisements and coupons meet mall standards.	Shoppers respond to tenant in-store signage, mall signage, brochures, and online advertisements.	Mall interiors need to be bright, attractive, aesthetically pleasing, and comfortable.
	<b>Service innovation</b>	Employ parking lot technology system that combines real-time vehicle counting with space-available signage as cars enter the parking lot.	The branding strategy must promote the mall brand as sophisticated, having a premium status, unexpected, stylistic, approachable, and of high quality.	Shoppers can obtain specific tenant updates regarding in-store prices or discounts via the mall's iPhone, iPod touch, and iPad app. Real-time promotions and discounts are integrated with Facebook.	Offer free wi-fi throughout the mall. Install charging stations so that mall shoppers can easily gather in common areas and engage in face-to-face and virtual communication.

Table 4. The HPM customer journey map: Post-service

		Touchpoint		
		Recommend a store to others	Talk to others about purchases	Plan on returning to HPM
Strategic Action	Mall shopper requirements	To have a positive attitude toward mall retailers.	To have a positive attitude toward recent purchases at mall. To be able to obtain memories during their shopping experiences.	Mall shoppers need reasons (products, services, information, entertainment) to return.
	Employee actions	Station customer ambassadors at help desks near entrance/ exist doors to encourage shopper feedback. Encourage mall tenants to display return policy.	Encourage mall shoppers to share purchase and activity information with others via social media. Provide shoppers with two screening areas that all them to post pictures. Give shoppers an incentive to use the mall's hashtag.	Mall marketing manager, social media manager, and operations plan email and mobile application strategies that allow shoppers to receive real-time updates on shopping center activities, show times, links to retailers, and their specials.
	Employee support	Mall's social media director is responsible for all post-service, online communication with mall shoppers.	Mall's marketing manager, social media director, and operations are responsible for maintaining the two screening areas in the mall.	Marketing manager, social media manager, and operations must be knowledgeable on internet technology.
	Mall design	Mall shoppers will respond to online initiatives and web design efforts that encourage dialogue among mall shoppers	Mall shoppers will respond to screening area that features the mall's name, website name, and interactive background.	Shoppers will react to the mobile applications interface, ease of use, links, reliability, and overall design appeal.
	Service innovation	Launch online initiatives that encourage shoppers to spread positive word of mouth feedback: semi-monthly newsletter, interactive blog, and online customer forums.	Two designated areas in the mall encourage shoppers to post pictures of themselves enjoying their mall experiences, products.	The mobile iPhone app allows mall shoppers to interface with the mall and learn about mall activities individual retailer activities. Mobile application is also linked to social media: Facebook, Instagram, Pinterest, Twitter.

improved map's simplicity and usability. CJM should diagram what customers really do, instead of what managers imagine they do.

Second, we recommend managers develop vertical axis categories that represent cross-functional strategic initiatives that link marketing, human resources, operations, and information technology at each touchpoint. In doing so, a customer journey map becomes a strategic tool for service innovation and a visual depiction of how a service system can work together at each touchpoint to improve a customer's

experience. Managers could also develop additional planning categories along the vertical axis, such as those that deal with branding opportunities and customer emotions; however, as the vertical axis complexifies, its efficacy as a management tool may decrease. Overall, the HPM customer journey map was successful because mall management focused on detailing important customer touchpoints and used cross-functional teams to implement strategic initiatives. This action improved the mall shoppers' experience at each touchpoint.

## References

- Bitner, M. J., Ostrom, A. L., & Morgan, F. N. (2008). *Service blueprinting: A practical technique for service innovation*. *California Management Review*, 50(3), 66–94.
- Clarke, S. (2014, January 30). Your digital journey is being mapped by your customers. *MIT Sloan Management Review*. Retrieved from <http://www.slideshare.net/capgemini/mit-digital-journey-2014>
- Court, D., Elzinga, D., Mulder, S., & Vetvik, O. J. (2009). *The consumer decision journey*. *McKinsey Quarterly*, 2009(3), 96–107.
- Dasu, S., & Chase, R. B. (2010). *Designing the soft side of customer service*. *MIT Sloan Management Review*, 52(1), 33–39.
- Lingqvist, O., Plotkin, C., & Stanley, J. (2015). *Do you really understand how your business customers buy?* *McKinsey Quarterly*, 2015(1), 74–85.
- Marketing Science Institute. (2014, April 15). *2014-2016 research priorities*. Retrieved from <http://www.msi.org/articles/marketers-top-concerns-frame-2014-16-research-priorities/>
- Skinner, C. (2010). *The complete customer journey: Avoiding technology and business barriers to measure the total value of media*. *Business Strategy Series*, 11(4), 223–226.
- Tschimmel, K. (2012). *Design thinking as an effective toolkit for innovation*. In *Proceedings from the XXIII ISPIIM Conference: Action for innovation: Innovating from experience*. Manchester, UK: ISPIIM.