Leveraging Customer Loyalty Data to Personalize the Service Experience

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Leveraging customer loyalty data to personalize the service experience
in the in-person customer-employee context

A thesis submitted to the School of Design, Carnegie Mellon University, for the degree of Master of Design in Interaction Design

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Abstract

Most people value the highly personalized service they receive from their barber, handyman, or financial advisor. These providers get to know individual customers, and they tailor their offerings to better match specific needs. This leads to loyalty, as customers return for the personal service. Interestingly, many national and international services (including retail stores, airlines, and hotels) buy their customers’ loyalty by running loyalty programs that offer points and rewards. Loyalty programs collect information on individual customers; however, this information never gets passed on to a customer service representative, allowing them to personalize the service they provide to an individual customer. My thesis project investigates if loyalty program data can be collected and fed back to a customer-facing employee, allowing them to personalize their performance to an individual customer in a way that both provides value to customers as well as makes the employee feel they are better at performing their job. To arrive at my service design recommendations for customer-employee interactions in in-person settings, I conducted interviews as well as a large online survey to test my design concepts.
Introduction

Most people value the highly personalized service they receive from their barber, handyman, or financial adviser. These service providers get to know individual customers, and they tailor their offerings to better match specific needs. This leads to loyalty, as customers return for the personalized service.

Many companies that provide consumer-facing services—such as retail stores, airlines, and hotels—buy their customers’ loyalty by running loyalty programs that offer prizes and rewards. Loyalty programs collect information on individual customers, but interestingly, this information never gets passed on to a service agent, which would allow the agent to personalize the service they provide to an individual customer.

There is an opportunity to leverage customer data in service delivery, allowing service agents to personalize their service delivery in a way that both provides value to customers and makes the service agent feel they are better at performing their job. Satisfying customers and employees often leads to better business results. The personal customer data can be (and already is) collected by companies via loyalty programs or by automated monitoring of customers’ interaction with the service. However, loyalty programs only benefit customers when they “earn” free products (e.g., airline miles or a 12th cup of coffee for free). Therefore, an opportunity exists to use loyalty program data (and other customer data) to personalize the service that customers receive in-store.

Customers have come to enjoy the personalized aspects of digital services like Netflix and Amazon, which customize the online experience based on the user’s prior interactions with the service. These kinds of personalization features go beyond what the vast majority of human customer service agents could come up with unassisted. Both Netflix and Amazon have mastered algorithmic personalization features like recommendations. These personalization features may be free to users of the service (customers don’t pay extra for the recommendations layer), but the fact that the leading digital service companies feature personalization is a sign that customers find it valuable or interesting.

While computers can effortlessly provide personalized experiences to customers on a one-to-one basis, computers cannot assess social situations very well. Human service agents like those found in retail stores, airports, and hotels can use their social and analytical skills, combined with personal customer data served to them when convenient, to provide an enhanced service experience. The service experience can be enhanced in utilitarian ways, such as providing useful information to the customer, or in emotional ways, by making the customer feel cared for as an individual. Human service agents can conduct this kind of service delivery without the drawbacks of a purely digital or robotic interaction like customers might find at a kiosk or from a digital character on a website. This is what

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1 Digital characters acting as customer service representatives aren’t exclusive to software characters like Microsoft Office 97’s Clippy. A “physical” hologram “person” can be found at Logan Airport in Boston. http://www.bostonmagazine.com/news/blog/2013/05/02/logan-airport-hologram-workers/
call centers get wrong: a customer’s information can be displayed to a service agent, but agents are sometimes required to deliver the service in a robotic way.

This thesis explores the nature of the customer-employee interaction from a psychological and social perspective, in order to understand more fully the nature of customer-employee interactions. This understanding is necessary before implementing such a feature in any customer-employee interaction context. A technological solution for how to provide customer data to an employee comes second, and is outside the scope of this thesis.

The benefits that may accrue to customers from personalized service are many, and deserve future exploration beyond this paper. For one, companies currently collect data on their customers and use it to improve direct marketing; the companies could use the data to improve the quality of the service as well. My thesis explores this question, specifically investigating how in-person, human-to-human interactions can be improved using customer data.

The insights drawn from this study of customer interaction with commercial services can be applied to other types of service as well. I did not study healthcare interactions, non-profit services, or public sector and government services, but I believe that the insights that are drawn from this research project may be extended to those contexts.

Furthermore, as the study of customer-employee interaction and personalization is very understudied, my work constitutes a unique contribution to the field of service design. The study of the interaction between customers and employees, especially from a service point of view, is not a mainstream topic of study in the field of psychology, marketing, or organizational behavior, nor is it a major topic of service design today. Nonetheless, I believe that within the next several years, some consumer-facing service companies will begin to attempt to implement something like what my project explores, and so it is important for interaction designers and service designers to begin studying the user’s needs and desires surrounding personalized service now.

My work unfolded over four distinct phases. First, I conducted a literature review to understand the problem space and learn about the state of the art, which I followed by expert interviews. Second, I conducted interviews with a target customer population. I interviewed several frequent business travelers in order to gain insights on how people perceive value in specific service encounters connected to loyalty programs. Third, I analyzed the data I had collected and used it to construct service design scenarios. I created a customer journey map using different frameworks for understanding customers’ reactions to services, then sketched several design concepts and wrote and drew storyboards to depict new service design scenarios. Finally, I used an online survey to evaluate the scenarios while also probing the boundaries of what customers and employees feel comfortable

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2 Many non-commercial (i.e. business-to-business) services these days are adopting interaction patterns from the consumer world in order to increase engagement as well as “customer” satisfaction. http://www.economistgroup.com/leanback/consumers/siegel-gale-b2b-consumerization-study/

3 It’s important to note that customer-facing employees are “users” in this context as are customers.
with, when it comes to exchanging privacy for the utility of enhanced service. I conclude with design recommendations about how to leverage customer loyalty data in service delivery.
Preliminary research

Before I began my thesis project, I conducted an independent study with a Master’s student in human-computer interaction to conduct user research and design a dashboard for use by customer service agents at mass-market retail establishments like drugstores or grocery stores. The dashboard was to show minimal amounts of personal data about customers, provided to the employees quickly in a glanceable format, so that the employee could customize his or her performance.

We conducted user research in order to quickly develop scenarios where we could try different data visualizations and interactions that an employee could have with the customer data. However, we learned that a lot of user research is required in understanding why a customer and/or employee might want personalized service in such a setting, and what kinds of interactions are best suited to personalization. We struggled at times to find the best way to present the concept to potential users, and to test the concepts we created in an appropriate way (see Fig. 1).

I chose to take up this topic again when it came time to begin my master’s thesis because I wanted to take the time to conduct my own service design and evaluative research in a more nuanced way. I didn’t focus on the form factor or information design of the dashboard, or the technology by which customer data could be served to employees, because I felt it was important to first understand what contexts were best for implementing this idea, and what types of interaction were most appropriate.

Fig. 1: A storyboard from user research during the independent study
Exploratory research: Literature review

Because my topic area straddles multiple academic disciplines, I read many different kinds of journal articles and articles from the popular press in order to understand the state of the art when it comes to personalized customer service and customer-employee interaction. Based on my own readings as well as personal conversations with researchers in other fields, I came to understand that little research closely examines the interaction between customers and employees or the question of how customers and employees react to using personal customer data to alter in-person service interactions.

Nonetheless, there are many topic areas from fields like service design, marketing, and management that touch on the topic of personalization and customer-employee interaction, and so I read influential papers from those disciplines in order better understand the topic area. My goal was to understand the landscape of service design, employee-customer psychology, personalization, and technology in order to design new ways for human service agents to personalize their behavior based on customer data. I was also curious to understand what kind of research had been done regarding allowing customers to deliberately customize the services they experience in in-person agent-customer service encounters. Though I ultimately didn’t pursue that question with my research project, I was interested to find that it’s something that has barely been studied by any of these academic disciplines.

Grounding definitions

A service encounter is defined as “the moment of interaction between a customer and a firm” (Bitner, Ostrom, & Morgan, 2008, p. 139). Bitner et al stress that often, the service encounter forms the totality of the customer’s understanding of a service (2008, p. 139). In other words, the customer’s satisfaction with an individual encounter can affect his or her understanding of the quality of the service as a whole.

The “service concept” is another term used in service design and literature on new service development that encompasses “the way in which the ‘organization would like to have its services perceived by its customers, employees, shareholders, and lenders,’ i.e. the organization’s business proposition” (Goldstein, Johnston, Duffy, & Rao, 2002, p. 123). Goldstein et al continue, “It has also been defined as the elements of the service package, or what Collier (1994) calls the ‘customer benefit package,’ i.e. the things that provide benefit and value to the customer” (Goldstein et al, 2002, p. 123).

A number of disciplines define and classify in-person agent-customer services differently. For example, a distinction is made between personalization (defined by Arora et al as when the firm

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4 Bettencourt and Gwinner write, “…scant attention has been given to the possibility of employees segmenting customers on the frontline and differentially responding to their unique needs, personalities, and expectations” (1996, p. 3).
decides how to alter the standard service in order to match the customer’s needs and desires) and customization (defined as when the customer proactively chooses elements of the service in order to tailor the service to him or herself) (2008, p. 305).

Literature about agent-customer interaction

The nature of agent-customer interactions has been thoroughly studied, but only before the age of big data and automated personalization. In the context of service design, this research focused on the ways agents and customers create services together. Agent behavior affects customer behavior, and vice versa (Bettencourt & Gwinner, 1996, p. 4). The store’s environment and marketing materials also affect customer behavior and attitudes. The experience of becoming a customer of a service organization can be thought of as a socialization process, where ongoing interactions between customer and company (including interaction with marketing materials and brand messaging outside the store itself) contribute to the customer’s understanding of the company and the service he or she participates in. Büttgen, Schumann, and Ates define socialization in this context as “the process by which organizational newcomers learn about and adapt to the values, norms, and required behavior patterns in the organization.” Büttgen et al quote Mills and Morris in calling customers “partial employees” of service firms because of this notion of socialization (2012, p. 169).

It is commonly accepted that frontline service agents are often considered to be the lowest-status people in the organization. In an article entitled “Predictability and personalization in the service encounter,” Surprenant and Solomon refer to Booms and Nyquist in saying,

“Though the service provider is typically the very last link in the chain of production and is, ironically, often the least-valued member of the service organization in terms of status and pay, this person is invested with enormous responsibility for conveying the ‘personality’ of the service offering to the consumer. In many cases, this person epitomizes or defines the service to the consumer” (1987, p. 87).

In order for a designed service to exist (in order for it to be carried out according to plan by human service agents), training and support must be offered to agents. While tracking and provision of customer data via technology is common in call centers, little innovation exists in in-store services to date. As of now, human service agents rely on their own heuristics to personalize their behavior when servicing customers. This is to be expected, as humans rely on heuristics to make the thousands of quick decisions about the world around them. In the context of a qualitative study involving extensive interviews with customer service agents, Bettencourt and Gwinner write that:

Customer contact employees classify consumers based on some limited set of preconceived stimuli (e.g. tone of voice, style of clothing, age, gender, type of request, etc.) in an effort to simplify and manage cognitive processing. Each employee’s classification scheme and the rules used for categorization will vary based on their personal knowledge, training, and past experiences. The customer categories are linked to behavioral strategies which guide an employee in interacting with particular consumer groups (Sujan et al, 1988)” (1996, p. 6).
Furthermore,

One of a marketer’s most effective tools is market segmentation, and as part-time marketers, frontline service providers also utilize the tool as an effective means of facilitating interactions with customers. P2 (“Frontline employees will use cues from the service encounter to categories the interaction and the consumer”) is illustrated by comments from several different service providers regarding cues they use in segmenting customers on the frontline” (1996, p. 7).

Of note is Bettencourt and Gwinner’s assertion that frontline employees are “part-time marketers.” Acknowledging service agent responsibility and expertise is key to the design of agent-customer interactions.

Understanding how customers derive satisfaction and delight from the interactions they have with human service agents is also key to understanding how the above-mentioned factors can be designed with and around when designing services. First, a definition of “satisfaction” and “delight” (two common terms from business literature both academic and otherwise) is in order. Bitner, Brown, and Meuter write that “delight has been conceptualized as distinct from satisfaction and a function of surprising consumption, arousal, and positive affect (Oliver at al, 1997)” (2000, p. 146).

In a paper on the use of self-service technologies, Meuter, Ostrom, Roundtree, and Bitner write about three important factors that affect customer satisfaction, which are echoed in other papers on agent-customer interaction. They are:

1. employees response to service delivery failure
2. employee response to customer needs and requests
3. unprompted and unsolicited actions by employees

Though examples can be devised that fall squarely into the latter two categories, I hypothesize that a hybrid category exists: unprompted responses to unstated needs. By experiencing service that has been personalized for them based on data-driven agent decision-making, customers can likely also experience satisfaction (or delight).

A customer’s understanding of a company’s service, as well as their previous interactions with it, also affect customer satisfaction and could have an impact the delivery of a personalized service. Kuusisto and Päänlysaho write that

it is widely held that service quality is perceived by customers through a comparison between service related expectations and experiences (Grönroos 2000, 67). Thus experiences are always relative to that what the customer considers reasonable based on prior experiences, service provider’s communications, and his own needs and aspirations in a particular situation (2008, p. 10).

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5 (2000, p. 51).
An understanding of a customer’s preconceived attitude toward service experiences, as well as his or her previous experiences with the company, could go a long way toward helping a customer service agent deliver the correct type of service. Solomon, Surprenant, Czepiel, and Gutman state that an important aspect of customer-employee interactions is predictability, in the sense that customers feel most comfortable when roles are well defined:

A role theoretic approach emphasizes the nature of people as social actors who learn behaviors appropriate to the positions they occupy in society… There is a trade-off between the gain in personalization when one is treated as an individual and the loss in predictability as the guidance provided by role expectations dissolves. … Despite occasional promises to ‘have it your way,’ consistency and speed are the scripted attributes which are important and desired by the customer. (1985, p. 4-9)

A second, related finding is the notion that customer satisfaction may be based on past experiences, but that attitude or service orientation is more general, and possibly fixed. Service theorists have no consensus on whether it’s desirable or useful to try to alter a customer’s service orientation, instead of catering to their orientation, whatever it may be.

Literature about the benefits to customers of interacting with human service agents

There are some important empirically-proven benefits to customers of interacting with human service agents. A 1998 qualitative study by Gwinner et al breaks down the types of social benefits that customers receive from their relationships with employees of companies they interact with. While benefits like friendship and familiarity were confirmed to exist, Gwinner et al found that confidence benefits were much more important to the participants in their study. They write,

The sense of reduced anxiety, faith in the trustworthiness of the provider, reduced perceptions of anxiety and risk, and knowing what to expect are the most critical benefits of service relationships. Sheth and Parvatiyar (1995) contend that consumers like to reduce choices. Long-term relationships may facilitate choice reduction through confidence benefits (1998, p. 110).

The idea of the “paradox of choice” (a concept popularized by psychologist Barry Schwartz’s 2004 book of the same name) has started to find its way into retail practice.

When customers and employees form a positive relationship, customer satisfaction as well as motivation to co-create tends to rise (Gwinner et al, 1998). In addition, the service experience is more likely to be optimized when there is a match between the personality characteristics of the employee and the customer and that the employee is able to elicit information (Bettencourt & Gwinner, 1996, p. 10). Figuring out how to hire people who will turn out to have the “personality characteristics” to match customers is something that companies have been seeking for a long time. Perhaps technology-

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6 Writes Bitner, “The key to distinguishing satisfaction from attitude is that satisfaction assessments relate to individual transactions whereas attitudes are more general (Oliver and Westbrook, 1982; Swan, 1983)” (1990, p. 70).
enabled personalization and customization could allow employees to treat customers in an optimized way rather than hope for “a match.”

Literature about personalization

Some definitions are in order, before an exploration of the benefits and drawbacks of personalization. Firstly, Surprenant and Solomon write that

‘personalized service’ refers to any behaviors occurring in [a service] interaction intended to contribute to the individuation of the customer…. The customer role is embellished in the encounter through specific recognition of the customer’s uniqueness as an individual over and above his/her status as an anonymous service recipient (1987, p. 87).

This definition reflects what customers expect in service encounters:

Customers appreciate service providers’ ability to adapt and adjust elements of the service in real time during service delivery to meet consumers’ needs and are dissatisfied when employees cannot do so (Bettencourt & Gwinner 1996) (Meuter et al, 2000, p. 60).

And furthermore:

We know from past research that customers expect and demand flexibility and customization in service encounters (Bettencourt & Gwinner, 1996; Bitner et al, 1990; Kelley, 1993). Customers do not like rigid rules—they want services that fit their individual needs, and they do not understand when rules cannot be broken or bent.” (Bitner et al, 2000, p. 142)

The ability of a human agent (as compared to a self-service technology) to adjust elements of service delivery to suit the customer in real time is a key characteristic of human agents that makes them preferable to self-service technologies in the current day.

My thesis makes an implicit assumption that personalization is a good thing. Lee (2013) discusses how personalization in services leads to higher-quality outcomes, better service satisfaction, and loyalty (p. 14-15). However, personalized services can have other negative effects as well. Some research shows that personalization can negatively influence customer perceptions (Surprenant & Solomon, 1987). Clearly, unfettered personalization, and allowing customers to choose a customized version of a service, may not yield a uniformly positive service experience. Software that can predict a customer’s in-the-moment orientation, and provide easy-to-understand data to a human service agent, could revolutionize the agent-customer service experience.

Benefits and Drawbacks of Personalization in Services

Findings about customers’ desire for in-the-moment adaptability and services that fit their precise needs illustrate the importance of personalization and customization in the service experience. There are some case studies that lend evidence to this observation. A study a retail bank tested the effects of personalization on many factors of customer perception, including perceptions of competence, friendliness, sincerity, and efficiency. Customized personalization of the service delivery was found to
have positive effects on ratings of helpfulness and sociability of service agents (Surprenant & Solomon, 1987). It would be interesting to explore Surprenant and Solomon’s 26-year-old findings with today’s customer populations who are used to automated banking.

Much of the literature indeed speculates about the future of customization, when technology will enable new practices: “We anticipate that the impact of customization on satisfaction will be much stronger in the future, because we can readily realize the great possibilities of customization when we consider Internet retailers such as Amazon.com,” state Meuter et al (2000, p. 60). Likewise, Bettencourt and Gwinner write, “Information technology is increasingly being applied to tailor the more technical (outcome) aspects of service delivery for individual customers” (1996, p. 15). While the authors may have imagined the future retail landscape of 2014, the potential of technology to make breakthroughs in this space is largely unexplored today.

Literature on loyalty programs

Loyalty programs are widespread among nationwide consumer-facing companies, and their popularity has recently spread to smaller, local shops or chains as well. Loyalty programs come in a few different forms, but they generally take the form of programs where customers receive points for making purchases. The archetypal loyalty programs are the airline frequent flyer program, the Subway Sub Club card (buy 11 sandwiches, get the 12th for free), or the grocery store discount card (discounts are only available to card holders). Joining the program is usually free for customers, because companies believe that the benefits they accrue from running the loyalty program outweigh the costs of running it.

Frequently, companies offer discounts to loyalty program members because they receive data about the customers in return about purchasing habits. These programs are theorized to help companies because they encourage customers to make more and more of their purchases with the company (“loyalty”) and increase their total spend at the company. The business benefits of keeping return customers instead of acquiring new customers have been proven time and time again (Gwinner et al, 1998, p. 101).7

One of the first loyalty programs was American Airlines’ frequent flyer program. The airlines, perhaps because of their head start in this arena, have some of the most sophisticated loyalty programs. Instead of providing free product (“buy 11 flights, get the 12th one free”), airlines have found a way to monetize things that don’t cost the airline anything to provide. For instance, giving the right to board the airplane first to the highest tier program members is something that doesn’t cost the airline in the same way that free drinks or free flights do.

7 “Customer retention is economically more advantageous than constantly seeking new customers (Verhoef 2003, Reichheld and Sasser 1990)” (Ward & Dagger, 2007, p. 1)
Loyalty programs are viewed with some amount of suspicion by experts, however, in part because of the nuanced definition of loyalty to a company. Bridson et al write,

Oliver (1997, p. 392) offers a similar unitary approach, whereby loyalty is defined as ‘a deeply held commitment to rebuy or re-patronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior.’ (2008, p. 3)

Although a customer may be persuaded by the promise of earning points and therefore makes many purchases at a company instead of at the company’s competitors, the customer may not feel true loyalty; indeed, he may feel resentment at the same time. Furthermore, many customers see loyalty programs as an opportunity to get products and services for free (see the many online forums and blogs about getting the most from your credit card or airline points). In response, some airlines have reevaluated the mechanics of their loyalty programs in the last one to two years. Delta, for instance, has changed the earning mechanism so that points are earned based on total spend and not on distance flown, as has traditionally been the case on airlines.

Literature on relevant technology

Technology, broadly speaking, enables human service agents to deal with information that they couldn’t store or access otherwise. This in turn has the potential to improve customer experience. Databases and digital data collection methods are already in use in customer service contexts, often with a result of a streamlined or optimized service experience (Bitner et al, 2000, p. 141), though technology can also be the source of customer frustration.

Unfortunately, the service design and marketing literature lacks studies that test technologies that are in line with the state of the art today. Nonetheless, certain frameworks can still be applied. For instance, Meuter et al’s 2000 study of digital versus in-person services provides valuable insight into why some customers perceive self-service technologies to be superior to in-person interactions. Of those interviewees who were satisfied with a self-service technology, 68% preferred it because they perceived that the self-service technology was a better alternative than the interpersonal method of service delivery. The group is made up of six subcategories, described subsequently, that highlight particular benefits that appear to lead to satisfying self-service technology service encounters (Meuter et al, 2000, p. 55).

The six subcategories are:

- easy to use
- avoid service personnel

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8 “Thus, while there are contradictory findings, extant literature does tend to support a general positive relationship between loyalty programs and store loyalty.” (Bridson, Evans, & Hickman, 2008, p. 4)
• saved time
• when I want
• where I want
• saved money

It is notable that the three main strengths of in-person interactions, as theorized by Meuter, don’t overlap much with the six strengths of self-service technologies. Meuter et al write that the three main sources of satisfaction (as well as dissatisfaction) in service encounters are response to failure, response to customer needs, and unprompted actions by personnel. The three positive characteristics that Meuter et al claim are strengths unique to interpersonal interactions are “excellent service recovery, customization/flexibility, and spontaneous delight” (2000, p. 60). While advances in human-computer interaction as practiced in the business world have improved the experience of interacting with self-service technologies since Meuter et al did their study, desire for better performance in service recovery and customization/flexibility are two areas where today’s self-service technology users still seek the human touch.

The state of the art in corporate environments

While reading academic papers about customer-employee interaction and personalization was helpful for me to understand the space, it was also important for me to become familiar with the state of the art in companies around the world. Much of the literature I read was published before the last two or three years, a time when technology has allowed companies to implement new and advanced data collection processes. The past few years have also seen companies, especially in the western world, emphasizing customer experience in a new way. Therefore, I conducted additional research to understand what kinds of personalization are being undertaken in companies today. I also interviewed several customer experience experts:

• An expert on in-store retail customer experience at a large digital consulting firm
• A design researcher at a consumer data gathering consulting firm
• A design manager at a hospitality-related tech company
• A customer experience expert from a management consulting firm
• An independent service design consultant

The expert interviews were done in order to try and learn about cutting-edge experiments in customer-employee interaction that I may have been unaware of.

I learned that although no company has implemented a system like what I designed in my thesis, some companies have attempted to use customer data to improve targeted marketing. Retail

Meuter et al write, of mishaps with self-service technologies, that “these failures can be disturbing, because the customer has no idea the transaction was not performed properly until later, when problems arise” (2000, p. 60).
technology firms like Nomi and RetailNext\textsuperscript{11} use data about an individual customer’s interaction with the store in order to customize advertisements and deals aimed at that customer. These experiments have mostly been carried out in department stores, including Nordstrom. Again, although a few retail companies have considered studying how personalization data could be used by frontline employees in their “innovation centers” or think tanks, no company to my knowledge has implemented such a system from a service design perspective.

Because interaction design has traditionally been so focused on digital interactions and designing the tools that workers use, instead of designing the actual work that they do, the use of customer data in service design has been left to marketing departments and other groups such as management consultants whose emphasis is advertising and sales. There’s an absence of academic research as well as real-life examples of customer data being used for service design, and that is part of why I am exploring this new territory from an interaction and service design perspective.

\textsuperscript{11} http://www.nytimes.com/2013/07/15/business/attention-shopper-stores-are-tracking-your-cell.html?_r=0
Problem definition and exploratory research

After exploring the state of the art, I chose to research the air travel industry. I needed to understand the business of the industry, including the different organizations involved in the air travel experience throughout the whole customer journey. I was especially interested in understanding current and ideal practices regarding customer experience management and the role of the employee. For instance, from the airline or the airport concessions companies’ point of view, what are their goals regarding training customer-facing employees, and what do they see as the employee’s role in enacting the customer experience? Understanding this would be necessary if I were to design customer-employee interaction scenarios that could fit into the current business landscape.

Because I wanted to focus on in-person customer-employee interactions, I determined that the three types of organization I needed to understand were the airlines, the organizations that manage airports (usually government agencies), and the concessions companies. I discovered that there’s very little publicly-available information about the airlines and concessions companies. Therefore, my research into the business practices consisted almost entirely of interviews:

- The director of customer experience at a regional international airport
- A former marketing employee from a legacy airline
- Two gate agents, both with 20+ years of experience, from a major North American city
- A flight attendant with 20 years of experience on a legacy airline
- Two design consultants with experience working with airline clients
- The head of a consulting firm that specializes in travel industry customer experience
- A real estate developer who focuses on developing concessions strategies and filling leases in airports
- The founder of a customer service consulting firm that has a lot of airport concessions company clients
- A planning director from an airport concessions management company

I also studied a few trade journals and documents from professional organizations related to the administration of airports.

Why did I choose the air travel context?

I chose the air travel context for a few reasons. Besides personal interest in the futuristic aspect of the airport setting, I thought that it might make users more receptive to thinking about scenarios based off the use of personal data. Since the airport is a highly instrumented environment prone to surveillance to begin with, where customers provide personal data as a matter of law before entering, I thought that it would make the user testing much more seamless, allowing me to focus on the service innovations instead of convincing the user to take the innovations seriously. Furthermore, because airlines already have such sophisticated loyalty programs, and because of the business case for improving the customer experience of semi-frequent and frequent travelers, I thought that the airline industry was a realistic context for experimentation.
After conducting user interviews and beginning some design scenarios, I decided to broaden my focus for the purposes of my online survey. Nonetheless, my research into the air travel context was helpful in the design of my service scenarios.

**Findings**

I developed a few key insights from my research into the airline industry, I quickly realized that I would need to focus on service recovery if I was to keep my focus on customer-employee interaction. During the air travel customer journey, customers don’t interact with employees in any meaningful way during ideal trips. Rather than attempt to change this status quo, which doesn’t represent a source of dissatisfaction for customers, I considered using personalization to improve the service recovery experience.

I learned about the attitudes toward customer experience and employee training in the airline, airport, and concessions. The gate agents I spoke with described a lack of training regarding segmenting customers for customer service. They sought to calm customers, especially those who had minor complaints during frustrating situations where other passengers were facing much more difficult service breakdowns.

Interestingly, the flight attendants I spoke with didn’t believe that they needed more personal customer data in order to do their jobs better. For example, one flight attendant told me that she has a company-provided iPad loaded with customer preferences for each customer in the business and first class sections of the flight.
Generative research: User interviews

I talked with customers about the airline experience. I did a round of user interviews with frequent air travelers. I wanted to learn about the pain points of air travel customers, and I chose frequent travelers (specifically, those in tiers of different airlines’ frequent flyer programs) to study because they would have a nuanced viewpoint and plenty of experiences to draw from. I also thought they made a good population to study because their satisfaction is of the most importance to airline companies.

I sought out business travelers such as management consultants who fit the requirement of being in a tier of a frequent flyer program. I wanted people from different tiers, from the lowest status level (on most airlines, “silver”) up to people in the highest tiers, for variety’s sake. I conducted hour-long scripted interviews with 14 business travelers. I asked exploratory questions but also used the Critical Incident Technique (Bitner, Booms, & Tetrault, 1990, p. 12) to delve into the customer’s feelings regarding negative experiences and service recovery during air travel. I also asked about the customers’ feelings of loyalty toward the airlines. While I knew I couldn’t assess each interviewee’s actual behavioral and emotional attitudes regarding loyalty to the company, I still wanted to ask each interviewee to try to articulate the level of loyalty he or she felt.

Interview methodology and questions

See Appendix A.
**Synthesis of data and design of service scenarios**

After conducting the interviews and other research, I used several synthesis methods common to the interaction design discipline, including customer journey mapping, using various frameworks, and sketching.

**Synthesis phase**

I began by creating mind maps (Fig. 2) in order to cluster the insights I’d gathered from the interviews. This helped me develop a few major themes.
I discovered that “rituals” and “social encounters” were two viable themes. I shaded in my favorite, more concrete ideas in yellow.

I also created a customer journey map depicting the current state of my interviewees’ experiences as air travelers (Fig. 3). I combined every interviewee’s description of their experience, from ordering transportation to go to the airport to arriving at their destination (usually a hotel or office in a different city). Then, I overlaid the journey map with a couple of well-known frameworks from interaction design research. The first is called “Rose, Bud, Thorn” and consists of marking everywhere on the journey that is a positive touchpoint (a “rose”), every place that has potential to become a positive touchpoint (a “bud”), and every negative touchpoint (the “thorns”). This helped me see which areas of the customer journey cause the most negativity, and therefore an opportunity to neutralize those problems, and which areas are positive, and should be emphasized. Then, I overlaid a second framework known as “Doing, Thinking, Feeling.” This is an exercise to help designers get in touch with the inner lives of users or customers. Because I had extensive interview transcripts, I was able to
estimate the thoughts and feelings of the passengers as they navigate the various touchpoints. This helped me consider areas of the journey that may not be outright “roses” or “thorns,” but which contribute to the overall experience passengers have during the air travel process.

Fig. 3: Customer journey map. See Appendix B for a bigger image.

Findings
Using the synthesis methods mentioned above, I was able to cluster my insights from the interviews into four main categories: customers’ relationship to information, service recovery, most positive and most negative experiences, and social aspects.

Customers’ relationship to information
Some of my most relevant conclusions from the interviews I conducted with business travelers had to do with those participants’ most positive and most negative experiences with air travel. What was very clearly shown in the data is the fact that many travelers, ranging from those who love to fly to those who only fly when driving isn’t feasible, have had their worst experiences caused by a lack of information. Particularly, customers’ worst experiences were caused by times they felt that information was being withheld from them. Rolling delays—when a flight is delayed incrementally by just a few minutes over and over-were a chief source of this kind of information disparity. Especially those interviewees with high status felt that being given insufficient or misleading information was insulting. Said one interviewee,

I got to [my layover airport] and [the airline] had overbooked the airplane, and they said they had to kick off some people because of weather but I knew that actually it was overbooked. So I didn’t believe their claim.

Another said, regarding a narrowly missed connection,
The flight in Houston was still on the ground, but they’d JUST closed the door. We ran all the way there, but they wouldn’t let us on. But then it sat there for 45 minutes and they still wouldn’t let us on. … They told us on the outgoing flight they would never ever open the door [once they’d closed it] to let on additional people. On the way home, the same thing happened though and they opened it! Some guy … in that case they opened it and let us on it. Bottom line we just thought the whole experience was really sketchy.

These cases of insufficient or “wrong” information are frustrating to the customer in obvious ways, and undermine customer trust in the airline business considerably. Based on my reading of the literature, I shouldn’t have been surprised that information and lack thereof is a major component in customer satisfaction and has been cited in the literature (Bitner et al, 1990, p. 12).

In order to understand this factor in the context of air travel and the airport experience, I spoke with a service design consultant who has considerable expertise on the airline business about these interview results, and he had some interesting things to say about the nature of transparency. Customers think they want transparency—more information—but with the existence of status tiers, would it actually be desirable (for any party) to have full transparency between airline, employee, and customer? Sometimes, the airline wants each customer’s status to be made clear: some high-status customers like the feeling of being served first, in front of the other passengers on the plane or at the gate, and the airline may benefit from this performance as well. At other times, making clear the existence of different passengers’ status levels could have a negative effect on the average customer experience.

Another case of data imbalance is the sense that the gate agent has a certain amount of discretion he or she is allowed to exercise. Customers don’t know how much power individual gate agents have when it comes to rebooking or reimbursing an inconvenienced customer. When a gate agent does “help” a customer, the customer may feel like the agent did it because he or she wanted to help the customer, and when the agent denies the customer’s request, then vice versa. Opening up these policies and facts to all customers is probably not in the airline’s best interest.

Striking the right balance between giving customers plenty of information, and not overloading them or causing awkward situations, is something I explored in designing and testing my service concepts later on.

Customers’ relationship to service recovery

When I asked the interviewees about their most positive experiences during air travel, participants relayed responses about times that an airline or airport employee helped save them from a self-inflicted mistake. A couple of people said they had gone to the airport on the wrong day, not realizing they’d purchased a ticket for the next day. When the ticketing desk agent let them go ahead and get on a flight that day (one day earlier than what they’d purchase), this constituted a “best” experience. Another participant said he had accidentally packed something important in his checked luggage on a
trip overseas, and only realized his mistake at the gate. An airline employee worked hard to find a baggage handler who could get the item before the passenger had to board; this was a “best” experience in his mind as well.

This is an interesting corollary to the service recovery paradox. While it is well known that customers can sometimes report greater satisfaction with a service that went wrong, then was corrected satisfactorily, I found that customers (at least in the airline context) had an extremely high rate of satisfaction when an employee helped them get out of a jam of their own creation. In other words, I found that not only were customers satisfied with a service when employees did something to fix an error; customers were even more satisfied when an employee fixed an error that the customer had undeniably caused. Because I hadn’t read about this phenomenon in the literature, I asked around among the customer experience experts I knew. None had read studies specifically about service recovery when the customer causes the mistake. However, one expert I spoke to conjectured that the emotional component of making a “mistake” in a highly regimented environment like the airport has something to do with it:

Much of the service recovery literature focuses on organizational mistakes (process or outcome errors). But I can understand how addressing a customer error would be even more memorable because it has an emotional component. With a customer error there’s no one to blame but yourself. You know you’ve screwed up; you have no right to complain and no way to solve the problem yourself. Then the employee magically fixes everything. That’s like absolution! Emotional relief and gratitude for unexpected help.

He cautioned me, though:

[A]re they actually more strongly positive than recoveries from employee-caused incidents? That’s less clear. That type of comparison would only be possible to evaluate when both types of incidents happen to the same person on the same trip. It seems like that would be rare.

The notion of helping customers avoid making mistakes is something that I explored in my design concepts as well.

Customers’ positive and negative experiences during the customer journey

I found that there were few to no negative experiences reported in the time between clearing TSA and arriving at the gate. This is something marketers call “the golden hour”–a period of time when the airline passenger has free time to spend in shops or at food service outlets, and is enjoying the relaxation that comes with clearing security and being on time. I also found that customers who used

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12 http://en.wikipedia.org/wiki/Service_recovery_paradox
13 For example, a customer who packed their passport in the checked luggage, and required the help of baggage handlers to retrieve it so as not to miss a weekend abroad.
this period of time (or their layover time) to engage in travel rituals (such as getting a massage or visiting a particular restaurant) tended to be customers who enjoyed air travel more overall and recovered from service breakdowns better. I wondered if encouraging formation of rituals could result in better customer satisfaction.

Customers’ attitudes toward socializing during the air travel journey

Many customers mentioned social interactions as an important positive aspect of traveling. Frequent business travelers reported enjoying their social interactions with favorite gate agents and flight attendants (whom they got to know quite well because they frequently traveled on the same airline) as well as with friends and acquaintances in the airport. I wondered if airlines or other organizations involved in the air travel journey could support social bonding and increasing the number of social interactions that customers have during trips.

Design phase

During the design phase, I moved back and forth between synthesis methods and more generative design methods as needed by sketching while using the above-mentioned bubble charts and customer journey map. I also wrote text to accompany visual storyboards depicting service scenarios. Sketching is widely considered (in the interaction design and HCI communities) to be a research method, while also producing design output. I sketched several preliminary design concepts, thinking broadly about the airport experience and not restricting myself to human-to-human interaction touchpoints (See Fig. 4). My goal was to develop a few design concepts and iterate on them through sketching. Sketching also has the added benefit of making an idea easy for others to understand, for quick feedback.
At Layover Airport

United App

Welcome to ORD!
Next flight in 55 min.
Gate K6

take monorail from Gate B1, or walk to
Terminal K for
4,000 steps!

TODAY

6,181 steps

NEW Blue Bottle Coffee
kiosk now located at
Terminal A/B food court

integration with
Fitbit (or MyFitnessPal,
or whatever)

personalized notification
of "new & interesting" product
or experience related to this
trip
Fig. 4: Preliminary sketches
A few challenges arose while sketching because of some specific aspects of the air travel context. Some experimental types of customer-employee interactions may not be applicable in the airport context. For instance, air travel has an extreme tendency toward self-service and efficiency, which causes customers to avoid any human interaction with the airline company, and excludes many opportunities to share interesting information with customers. The relative similarity of passenger needs and can also make the space somewhat less rich for experimentation. Therefore, I designed for different service and retail industries beyond air travel going forward in my project. (This also had the benefit of making it easier to test with a variety of survey takers, because the scenarios wouldn’t rely on the survey taker’s experience with air travel.)

**Design of scenarios**

I translated the insights from my interviews and synthesis exercises into five categories of service interaction that have a high opportunity for experimentation with regard to customer-employee interaction:

1. **Category 1:** Employee *gives customer information about something new or valuable* related to the store (i.e., new information relevant to customer’s interests, new products, information that previously was not relevant to customer, but now is)

2. **Category 2:** Employee *helps customer make a better choice*. This includes avoiding customer mistakes

3. **Category 3:** Acknowledgement and *recovery from service breakdowns*

4. **Category 4:** Recognizing the *customer’s loyalty*. This includes quantified self-y stuff, thanking the customer, showing familiarity/recognition

5. **Category 5:** *Service orientation* data collection & provision. (New data enters the system via the human channel)

I designed a total of 20 scenarios with storyboards and text describing the scenario from the customer’s and employee’s point of view. I designed from both perspectives for two reasons: first, in order to understand the service from both points of view and make sure that I was creating something beneficial and humane for both populations, and second in order to test both versions of each scenario in my online survey. A list of all 20 scenarios is in Appendix B.

Once I had designed my scenarios and revised them under the guidance of my faculty advisers, I evaluated them further by gathering data from a variety of customer and employee populations. I needed to understand customers’ and employees’ attitudes toward the use of personal data in in-person interactions. What characteristics might mitigate users’ concerns about privacy violation? Which industries or settings are users most comfortable with using their personal data to customize the service experience? I also wanted to test the desirability of the designs I’d created. For
instance, are designs relating to one of the five categories above more desirable than other types of service interactions? Finally, I wanted to see how employees react to being provided with customer data.
Evaluative research: Online testing

In order to answer the questions that arose after creating my design scenarios, I created an online survey. I predicted that my design innovations would have a small positive effect on customers, and in order to provide evidence the improvement, I would need a large sample size. I also hoped to reach a broad range of respondents from different walks of life this way. Using an online survey does have its drawbacks. For instance, I was unable to ask respondents follow-up questions to the free-text responses they provided. Nonetheless, the survey was very effective at collecting both qualitative and quantitative data on my designs.

Survey mechanics

The survey, constructed in Qualtrics, provided ten scenarios to each respondent. At the beginning of the survey, respondents were asked if they had worked as a customer-facing employee. If the respondent said yes, he or she received five customer-point-of-view scenarios followed by five employee-point-of-view scenarios. If the respondents said no, then all ten customer-point-of-view scenarios were displayed. The scenarios were presented in random order so that respondents who quit the survey early or got survey fatigue wouldn’t confound the data on the scenarios at the end of the list.

Each scenario had the same questions. Customer-point-of-view scenarios had these questions:

- Please think of a time when you recently took a flight. How does the above scenario compare to your own experience?
  
<table>
<thead>
<tr>
<th>Less desirable</th>
<th>No preference</th>
<th>More desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Would this kind of customer service make you want to fly on this airline instead of a similar one?
  - Yes
  - Maybe
  - No

- Why?

Employee-point-of-view scenarios had these questions:

- How well do the tools that this salesperson uses help to make them better at their job?
  
<table>
<thead>
<tr>
<th>Not at all</th>
<th>About the same</th>
<th>A lot better</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- How? Why?

- How would you customize your delivery if you were serving customers in this context?

These questions allowed me to collect quantitative data as well as qualitative free-text responses.
Survey distribution
I distributed the survey among friends and family as well as the frequent business travelers and experts that I interviewed in the fall. The survey was also posted on social media. Additionally, fifty respondents were recruited via Amazon’s Mechanical Turk service. When these two respondent populations’ responses were compared, there were no differences between the responses given across all questions and scenarios.

Survey results
The survey received 204 usable responses. Of the 204, 90 respondents indicated they were or had been customer-facing employees. Repeat responses were thrown out.

   The numerical ratings of the scenarios served as a starting point for assessing the designs’ success. As no scenario received an average score below 3 (scenarios were ranked on a seven point scale from 0 to 6), I then analyzed the scenarios’ ratings to see if any were polarizing (i.e., receiving many scores at the low end of the range and the high end, resulting in a moderate average score). I counted references to certain ideas and attitudes in the free-text responses in order to understand why the scenarios received the ratings they did.

Highest average ratings
In analyzing the survey data, the natural impulse is to compare the scenarios’ average ratings.
Fig. 5: Average rating for each scenario

- Home Depot customer is warned before attempting to make an erroneous purchase
- Anxious traveler is soothed preemptively by airline employee offering extra information
- Hotel customer is notified of what’s new in the neighborhood since you last stayed here
- Semi-regular customer is recognized at coffee shop
- Employee apologizes for last trip’s weather delays and wishes good luck
- Cosmetics buyer is notified of product that aligns with her political beliefs
- Target customer is notified of a favorite item now on sale
- Customer is offered a sample of a cosmetic that goes with products she already has
- Customer’s name and regular order is already known at out-of-town coffee shop
- Movie box office worker congratulates customer on 50th movie at this theater
Interestingly, from the employee perspective, two scenarios didn’t get any scores below 3. Those would be the hotel information scenario and the anxious traveler airport scenario.

### Polarization

In addition to looking at the scenarios’ average ratings, I also analyzed the scenarios according to an additional criterion: I wanted to know if the highest-rated scenarios show some or all people responding with strong positivity, with the rest of the respondents giving a moderate rating? (i.e., the scenario isn’t engendering a small but fierce population of objectors.) To determine the answer to this question, I analyzed each scenario for polarization, using the quantitative rankings as well as the free-text responses that many survey respondents entered.

Some scenarios had a lot of agreement (most people gave the same score), whereas other scenarios split the population. For instance, the Movie theater scenario (customer version) was not very polarizing. Out of 138 respondents, 39% of the respondents gave it a 3. The free-text responses indicate that the interaction is creepy to some, and that it’s not useful because the employee doesn’t offer a free popcorn or ticket. Similarly, the Paint primer paint scenario (customer version) received overwhelmingly high scores.

A couple of scenarios were more polarizing. For instance, on the Cereal sale customer-version scenario, respondents were split between saying it’s useful and creepy. Out of 154 respondents, 44 said it was useful, and 44 said it was creepy. (Ten people said both.) Respondents for the employee version also mentioned the creepiness factor in this scenario.

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<table>
<thead>
<tr>
<th>Customer point of view</th>
<th>Employee point of view</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <em>Paint primer</em> (4.6) and <em>Airport Information</em> (4.6)</td>
<td>1. <em>Airport information</em> (5.0) and <em>Hotel customer</em> (5.0)</td>
</tr>
<tr>
<td>2. <em>Hotel customer</em> (4.5)</td>
<td>2. <em>Paint primer</em> (4.8)</td>
</tr>
<tr>
<td>3. <em>Semi-regular customer at hometown coffee shop</em> (4.2)</td>
<td>3. <em>Animal testing cosmetics</em> (4.6)</td>
</tr>
<tr>
<td>• Employee version is 4.3</td>
<td>• Customer version is 3.7</td>
</tr>
</tbody>
</table>

Fig. 6: Highest rated scenarios, customer and employee versions
Respondents with a high rate of variance

The responses were analyzed individually by respondent in order to cluster respondents by attitude. Specifically, those respondents whose numerical responses varied more highly than the average were separated and their responses analyzed in comparison to the average. Respondents with higher variance in their ratings gave lower over-all ratings on average. Based on their free-text responses, I believe that this cluster of respondents has a utilitarian service orientation, as they tended to focus on the material benefits of the customer rather than emotional benefits or the employee’s expertise. For instance, on scenarios such as the Movie theater, they were more likely to give a low number (instead of a 3, representing average) because of the “uselessness” of the personalization.

Additional insights and analysis

The Hotel Info and Airport Info scenarios were some of the most highly rated, confirming that people clearly like and feel comfortable with more information. This fits with the findings from earlier interviews.

Scenarios from the employee’s point of view were rated more highly on average. A couple of scenarios appealed highly to employees, but weren’t interesting to customers. These were the makeup store scenario where the employee can see information about what products the customer has at home already (and can recommend a matching product for her to buy), and the scenario where an out-of-town customer’s name and favorite order is already known at a chain coffee shop.
Reflections

Lessons learned
The data analysis above can be distilled into several lessons learned for service designers:

• While the theory that the service experience can be improved by providing information to customers was resoundingly confirmed, my survey results showed that customers and employees both would like to have access to more information. The amount of information distributed to individual customers can be determined based on a customer’s prior interactions with the service or company. Employees may find it useful to have personal information about customers, even if customers find the interactions enabled by that information to be mediocre. Giving employees data to help them feel more competent at serving customers may be beneficial to employee job satisfaction.

• Customers are bored by quantified-self-type data, for instance in interactions that provide them with about their past usage (e.g., “This is your 50th visit to Cinema Delux!”). These kinds of interactions should be avoided, as they provide no value to the customer nor to the employee.

• Using personal data in a way that appeals to an individual customer’s service orientation or that provides utilitarian value won’t be perceived as a privacy violation. On the flip side, data given out of context, even if highly useful to the customer, emphasizes the store’s access to personal customer data (e.g., alerting a customer of a favorite grocery item sale while the customer is shopping in a non-grocery department). Many customers will find this out-of-context data provision intrusive.

• Finally, my finding regarding the service recovery paradox from the frequent business traveler interview phase, that customers are grateful for interactions that help them avoid a self-inflicted mistake, was confirmed by my online survey. Naturally, it is important to find a way to notify customers of the impending mistake in a sensitive and non-condescending way.

Opportunities for further study
There are many opportunities for further study. Two open questions stemming from my own results have to do with service orientation and service recovery.

My research revealed that customers who have a utilitarian service orientation may be more likely to grow impatient or irritated with the use of personal data when it isn’t providing them any useful service. More research on customer segments who may be more prone to offense at the use of personal data in less-specific contexts may be needed in order to help companies implement this kind of service innovation in the most sensitive way.
The finding regarding service recovery stemming from a self-inflicted mistake is another interesting topic for which I could find no specific past research. More research is needed to understand this phenomenon fully.

**Conclusion**

In this thesis, I set out to design ways to use customer data to improve the in-person, human-delivered service experience. Because of my prior experience studying this topic, I focused deeply on research and designing research tools—namely, an online survey. I did this in order to best evaluate my concepts. What I learned about personalization and service design could be implemented in a variety of contexts in order to provide customers with the experiences that will result in the greatest satisfaction for both customer and employee.
Sources


Appendix A - User interview protocol and questions

Part 1: Greet the person and get them in the mood to talk about airport itinerary mishaps

Preliminary chitchat

• First of all, what levels did you have and when did you have them?
• How often do you travel? How much business vs. leisure?
• What kinds of destinations do you go to on leisure trips?
• When was your latest vacation (where you flew)?
• How do you use loyalty programs in travel (hotel etc.) or other loyalty programs?
• Do you use any program like TSA Pre-check, or have you looked into doing so?

Part 2: Let’s talk about booking

When you book a flight, what are your criteria?

• Layover length/location
• Is there an airport or an airline that you really like?
• Have you ever had a good, memorable experience at an airport? Or with an airline company?
  o What were the circumstances around the good experience? Figure this out

Part 3: the customer journey of flying, in general

• What’s your normal routine, from leaving your house to arriving at the destination hotel?
  o Talk about airport shopping/food stands in particular
• When/how do you check in?
• Do you use any airline-brand apps? Do you use any other apps such as Loungebuddy?
• Do you like to buy any add-ons like “extra legroom” or pay-per-view movies?
• Can we talk about how the routine is different when you go to the airport on your way home from a trip?

Part 4: Let’s talk about a recent problem you had while flying.

Now let’s talk about a recent time you had something go wrong with your trip. Can you think of any examples? (If they bring up multiple examples, talk about each one, but go into depth on only one example. Talk about the examples one at a time. Try to really get into that person’s coping or avoidance strategy.)

Critical Incident Technique

1. What led up to the event?
2. What happened during the event?
3. How did it make you feel?
4. Did you change your behavior at all after this experience?
5. How did the changes you made work out for you?
   a. How often has this type of bad experience recurred?
   b. Ask a bunch of standard loyalty questions here such as:
      i. Did you tell other people about this bad experience?
      ii. Did you stop buying from this airline / going through this airport for a while as a result?

Part 5: Goodbye
Appendix B – Customer Journey Map
## Appendix C - The twenty service design scenarios

1. **Employee notifies customer of a special discount on customer’s frequently repeatedly purchased item**

<table>
<thead>
<tr>
<th>Customer p.o.v.</th>
<th>Employee p.o.v.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
</tbody>
</table>

Whenever she’s at Target, Ann checks to see if the Cascadian Farm Cinnamon Raisin Granola is on sale. Whenever it is, she buys one or two boxes. It’s her favorite cereal, but she feels that at the regular price it’s too expensive for her to justify as an everyday purchase.

This afternoon, Ann is at Target browsing for clothing. She’s looking at a rack of tights and socks when a Target employee walks by. He stops and says to Ann, “Hey, Ms. Smith -- just wanted to let you know that we are having a sale on Cascadian Farm stuff, like cereal and granola bars!”

Ann is happy to hear this, and when she’s done looking at clothing, she goes over to the grocery section to get a box of the cereal.

Jay is an employee at Target. Today he is stocking the shelves in the clothing department. He carries with him a small tablet computer that was given to him by the Target manager - the device has information that he can give to customers to help them have a better shopping experience.

He glances at the tablet computer as he walks by the socks display. It shows that a customer who is currently browsing the socks display is a big fan and frequent buyer of Cascadian Farm Cinnamon Raisin Granola, but only when it is on sale. It prompts him to mention the current sale to her.

Jay says to the customer, “Hey, Ms. Smith -- just wanted to let you know that we are having a sale on Cascadian Farm stuff, like cereal and granola bars!” The customer smiles back; Jay is happy that he helped the customer not to miss a great deal.

2. **Employee shares information with customer that is important to the customer’s identity (political/social belief)**

<table>
<thead>
<tr>
<th>Customer p.o.v.</th>
<th>Employee p.o.v.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
</tbody>
</table>
Sarah is shopping at Sephora for lipstick. She’s browsing the Urban Decay rack because she knows that Urban Decay’s products are not tested on animals. In fact, she tries to buy only those products which are not tested on animals.

A salesperson is standing at the Too Faced rack, restocking the shelves while the display is free of customers. The Two Faced display is across the aisle from where Sarah is standing. The salesperson says to Sarah, “Did you know that Too Faced just announced that they’ve discontinued animal testing? We’ve been selling a lot of their Spring collection this week.”

Sarah is happy to hear this, because it means that now there is another brand of makeup she can buy and be able to feel good about because she’s supporting a company that doesn’t test on animals.

Amanda is an employee at Sephora. She is aware that customers buy from different brands for a lot of reasons, and she can’t always predict customers’ preferences.

Today Amanda is re-stocking a display with products by the makeup company Too Faced. She carries with her a small tablet computer that helps her be a better saleswoman. While Amanda is standing in front of the Too Faced rack, the tablet computer gives a gentle alert that it has useful information for her right now. Amanda looks at the screen, which tells her that there is a customer right now in front of the Urban Decay rack who cares about companies not testing their products on animals. The device also shows that Too Faced recently announced that they have discontinued animal testing.

Amanda sees that the customer is just a few feet away, so she says to the customer, “Did you know that Too Faced just announced that they’ve discontinued animal testing? We’ve been selling a lot of their Spring collection this week.”

The customer thanks her for this new information and walks over to look at the Too Faced products. Amanda is excited that she gave the customer useful information about the things Sephora sells.
3. Employee notifies a frequent hotel customer of a new service (new nearby Zumba class)

<table>
<thead>
<tr>
<th>Customer p.o.v.</th>
<th>Employee p.o.v.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah is a tax consultant and fitness fanatic who often travels for business.</td>
<td>Katie is an employee at a hotel in Chicago. She works at the front desk, checking</td>
</tr>
<tr>
<td>She has traveled to the same Chicago Marriott several times a month this year</td>
<td>in customers. It’s Monday morning and a woman is at Katie’s desk checking in for</td>
</tr>
<tr>
<td>because of her job.</td>
<td>a stay.</td>
</tr>
<tr>
<td>It’s Monday morning and Sarah is checking in at the hotel again. As the</td>
<td>Katie’s computer points out that this customer stays at the hotel frequently—it</td>
</tr>
<tr>
<td>employee at the front desk hands her the room key card, she tells Sarah,</td>
<td>says this customer has checked in at this hotel five times already this year,</td>
</tr>
<tr>
<td>“I wanted to let you know about a few new things here on Michigan Avenue</td>
<td>each time for a week-long business trip. Her latest stay was five weeks ago.</td>
</tr>
<tr>
<td>since your last visit. We’ve just opened a new wine bar on the mezzanine that’s</td>
<td>The computer suggests that Katie tell the customer about some new services and</td>
</tr>
<tr>
<td>open til 1 a.m.</td>
<td>events near the hotel that the customer might like:</td>
</tr>
<tr>
<td>There’s a new Zumba studio opened up around the corner on Grand Avenue.</td>
<td>• A children’s street fair on the hotel’s block during the customer’s stay</td>
</tr>
<tr>
<td>They take walk-in appointments too, you don’t need a membership. We’ve also</td>
<td>• a new Zumba studio that opened up near the hotel</td>
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<tr>
<td>developed a new partnership with a dry cleaner a couple blocks away where you</td>
<td>• an interesting wine bar that just opened inside the hotel</td>
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<tr>
<td>can leave your items with our concierge and he will deliver and pick up the</td>
<td>• A conference space in the hotel for frequent customers to use for business</td>
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<tr>
<td>items when they’re finished.”</td>
<td>meetings</td>
</tr>
<tr>
<td>Sarah tells the front desk employee she hopes she can go there this week.</td>
<td>• A dry cleaning service that the hotel concierge can deliver your clothing to</td>
</tr>
<tr>
<td>She’s happy about this, because she loves fitness classes, but she doesn’t</td>
<td>down the block.</td>
</tr>
<tr>
<td>want to buy a gym membership in all the cities she travels to for work.</td>
<td></td>
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</table>

Katie knows that a couple of these ideas won’t be interesting to the customer, like the children’s street fair, because she’s here in Chicago on a business trip. Katie says, “I
wanted to let you know about a few new things here on Michigan Avenue since your last visit. We’ve just opened a new wine bar on the mezzanine that’s open til 1 a.m. There’s a new Zumba studio opened up around the corner on Grand Avenue. They take walk-in appointments too, you don’t need a membership. We’ve also developed a new partnership with a dry cleaner a couple blocks away where you can leave your items with our concierge and he will deliver and pick up the items when they’re finished."

The customer says she hopes she can go to the Zumba studio sometime this week before work because she loves fitness classes. Katie is happy that she gave the customer some useful information.

### 4. Employee helps customer avoid a mistake (paint primer)

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<thead>
<tr>
<th>Customer p.o.v.</th>
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<td>Ann is painting her bedroom as part of a remodel. She’s almost finished priming and painting all the walls, but she ran out of primer before finishing the final wall. So, Ann drives over to Home Depot to buy a one quart can of primer so that she can quickly finish her painting project. She picks up a can of oil-based primer for drywall that’s the same brand as the now-empty one she had been using at home.</td>
<td>Anthony is a customer service employee in the paint department at Home Depot. He knows that a lot of people come back multiple times over the course of a home renovation project because they need additional supplies. But, Anthony doesn’t remember what each customer is working on at home. Today, a customer is browsing the primers, chooses one, and walks away. Anthony’s work-issued tablet computer, in the pocket of his</td>
</tr>
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</table>
Ann starts walking away from the paint department with the can of primer in her hand, and an employee approaches her. He says, “I think you were here a few days ago but you bought a latex primer. This one is oil-based though. Are you sure you didn’t mean to buy latex?”

Ann looks back at the can and realizes the cashier is right - she needs latex primer because that’s what she was using at home before. If she tried to use the oil-based primer to continue her project, the paint wouldn’t have worked right.

Anthony quickly walks up to the customer and says, “I think you were here a few days ago but you bought a latex primer. This one is oil-based though. Are you sure you didn’t mean to buy latex?”

The customer says thank you because she realizes that using oil-based primer would cause a bad reaction with the paint she has at home! She turns around to go get the correct primer from the shelf.

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### 5. Airline employee apologizes for bad weather on previous visit

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Bob is waiting in line to check his luggage at the airport. He’s on one of his frequent business trips to Los Angeles. He’s thinking back to his last business trip, when heavy rains here in his hometown kept his flight from leaving for over a day, which caused him to miss a lot of work.

As Bob walks up to the desk, he hands the ticketing agent his boarding pass, and puts his suitcase on the scale.

The ticketing agent says, “Here is your claim ticket for the bag, Mr. Smith. I’m really hoping

Mark is an airline employee. Today he is working at the ticketing desk, where people check their bags before going through security. Since Mark is the last stop before the security line, he encounters a lot of stressed out and nervous customers. He tries to make them feel more relaxed whenever he can.

A customer walks up to check a bag. A small alert on Mark’s computer shows that this customer, Bob Smith, had a VERY adverse event on his last air travel trip because of the weather that day.
for good weather for you this time; you deserve it! I’m so sorry about last time.”

Mark says to Bob, “Here is your claim ticket for the bag, Mr. Smith. I’m really hoping for good weather for you this time, you deserve it!” He hands Bob the claim ticket for his checked suitcase. “I’m so sorry about last time,” Mark continues. Bob’s mood seems to lighten because of Mark’s positive comment.

6. Celebrating customer’s heavy usage: Movie theater

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| Jason is a big movie fan, attending most of the movies he watches at the Cinemark movie theater near to his house. He goes with friends, by himself, with his family (especially on holidays). In other words, there are many different kinds of situations where Jason goes to the movie theater. Today he’s there with a couple of friends, buying tickets at the box office. The cashier gives him the tickets, and says, “Hey Jason, did you know this is the 50th movie you have seen here at the Waterfront 18? Enjoy the show!” Jason thinks back on all the great movies he’s seen in the theater. When Jason enters the theater screening room, a worker inside the theater says to him, “Hey Jason, we saved you a seat in the middle of Row K.” | Zack is a cashier at the box office at a large movie theater. Today, he’s selling tickets when his cash register screen shows an alert. It says that the customer he just rang up is on his 50th visit to this movie theater. The screen gives the customer’s name as Jason Smith. Zack says, “Hey Jason, did you know this is the 50th movie you have seen here at the Waterfront 18? Enjoy the show!” The customer smiles and walks in. Inside the theater, a different employee is standing on the stairs of one of the screening rooms. He gets a notification on the special mobile device he uses at work to help him help customers have the best movie experience possible. The device tells him to reserve three seats for a customer named Jason Smith. When Jason enters the theater moments later,
the employee says, “Hey Jason, we saved you a seat in the middle of Row K.”

### 7. Enhancing customer’s relationship with favorite brand (Laura Mercier blush add-on)

**Customer p.o.v.**

Ann is at Sephora browsing the Laura Mercier lipstick area. Laura Mercier is one of Ann’s favorite brands.

A saleswoman standing near Ann says, “You should try the Laura Mercier Second Skin blush. It’s really great. The Laura Mercier representative told me that they specifically formulated it to go with their pink Stickglosses - I think you have a couple of those already. I could go get you a sample of the blush to try at home, if you want.”

**Employee p.o.v.**

Amanda is working with a couple of other employees at the cash register at Sephora when the number of people in line starts to tail off. She leaves the cash register area and checks the small tablet computer that her manager gave her to use at work. The device can give her information to help her give customers a better shopping experience and be a better saleswoman.

The tablet shows that there is a customer in the store who should be recommended a specific product (the Laura Mercier Second Skin blush) based on that customer’s past purchases, which are listed on the screen.

Amanda walks over to the customer and says, “You should try the Laura Mercier Second Skin blush. It’s really great. The Laura Mercier representative told me that they specifically formulated it to go with their pink Stickglosses - I think you have a couple of those already. I could go get you a sample of the blush to try at home, if you want.”
The customer is excited about the sample, and Amanda is happy that she helped the customer find a potential new product that’s right for her.

8. Customer loyalty known, even when out of town

Customer p.o.v.  Employee p.o.v.

Bob wakes up in a hotel where he’s staying during a business trip. The hotel is attached to a Starbucks. Back in his hometown, Bob goes to Starbucks almost every morning during his commute; today, he goes to the Starbucks by the hotel to maintain his normal morning routine. Usually, Bob likes to order a Redeye, which is a regular coffee with a shot of espresso added.

As Bob walks up to the counter, he sees that the barista has already picked up an empty size medium cup and is writing “Bob” on it. The barista says, “Morning, Mr. Smith. Grande Redeye?”

Bob nods, pays, and walks off with the drink, happy that the transaction went so quickly and correctly.

Kevin is a barista at a Starbucks that is part of a hotel. A lot of his customers are people staying at the hotel on business trips or on vacation.

As a new customer enters the Starbucks, Kevin’s cash register shows that this customer (whom Kevin has never seen) is a regular at a different Starbucks, and therefore the register has a lot of information on his everyday order and how he likes to interact with baristas.

The cash register gives the customer’s name, commonly-ordered drink (a medium-sized Redeye, which is a coffee with an espresso shot added), and also lists the customer’s service orientation as “utilitarian,” meaning the customer likes efficiency. Kevin picks up a medium-sized cup, writes the customer’s first name on it, and says says to the customer, “Morning, Mr. Smith. Grande Redeye?” The customer nods, holds up his Starbucks iPhone app to pay, and happily takes the coffee and exits.
### 9. Service orientation: airport information details

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<td>Ann is at the airport because she’s leaving for a vacation to Florida. She finds flying to be a little nerve-wracking, so she’s constantly checking the flight status and making sure that she has her ID and tickets and everything in her bag. She walks up to the airport’s ticketing counter to drop off her suitcase. The ticketing agent processes Ann’s bag drop-off and says, “Here is your baggage receipt, Ms. Smith. Just to confirm, you are on flight 191 to Miami. It’ll start boarding at Gate B6 in about 41 minutes. Then in Atlanta you’ve got a one hour and 33 minute layover. You’ll land in Terminal C there and the connecting flight’ll take off from Terminal D, which is about three minutes on the airport monorail. Don’t worry, it comes every six minutes so you’ll have some extra time.” Ann feels reassured, knowing that she has plenty of time to get on her flights, and that they are on time.</td>
<td></td>
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<td>Mark is a ticketing agent for Delta. A customer walks up to his desk to check a bag, and his computer shows some information about her. It says that this customer frequently logs in to her Delta.com account to make sure that the flight isn’t canceled, and to look over the details of the trip. That morning, she kept opening the Delta app on her phone to make sure the flight would be on time. Delta’s customer database recognizes these kinds of activities as indicative of a more anxiety-prone customer. The computer tells Mark to give extra information to this customer to help her feel relaxed and in control of the situation. Mark says, “Here is your baggage receipt, Ms. Smith. Just to confirm, you are on flight 191 to Miami. It’ll start boarding at Gate B6 in about 41 minutes. Then in Atlanta you’ve got a one hour and 33 minute layover. You’ll land in Terminal C there and the connecting flight’ll take off from Terminal D, which is about three minutes on the airport monorail. Don’t worry, it comes every six minutes so you’ll have some extra time.” The customer seems to relax a little when she hears this.</td>
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## 10. Everyone’s a regular

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Bob is a semi-frequent Starbucks customer. He likes to stop by at a location that’s on his way to work a few times per week, and he likes to order a size medium Redeye (a coffee with an espresso shot added in) with French Roast coffee. Bob really prizes efficiency as well, so he likes it when his transaction goes quickly and smoothly, like a well-oiled machine.

This morning, he’s at Starbucks like usual. As he steps up to the counter, the barista gets out a medium cup and starts writing “Bob” on it. The barista says to Bob, “Morning, Mr. Smith. Grande Redeye?” Bob nods, holds up his Starbucks payment app to the scanner, and the transaction is done.

Wesley is a barista at Starbucks. Every day, people come in on their morning commute, and some seem to like a little discussion, but others want to get their coffee as fast as they can so they can get on to work, according to their different personalities. Wesley knows a few of the people by face, because they come so often, but if a customer comes a little less frequently, he can’t always remember their interaction style or their regular order.

The cash register at Starbucks has a screen where the cashier can mark each customer’s service orientation as social versus utilitarian (that is, how the customer likes to interact with employees). Wesley’s notes, as well as the data marked down by other Starbucks employees, are time stamped so that a full picture of the customer’s service orientation, attitudes, and routines can be recorded along with his/her transaction history. (This way, somebody who “isn’t a morning person” can be treated differently in the afternoon versus the morning when they come in.)

This morning, a customer comes in during the morning rush. At first glance, Wesley isn’t sure if he recognizes this person as a regular customer or not. But, because of the cash register screen, Wesley can identify those regulars he doesn’t recognize on his own, and the information on the screen helps him treat
them as regulars.

As this customer advances toward the counter, a profile of him pops up on Wesley’s cash register screen, showing that this customer is Bob Smith, who likes a medium French Roast coffee with one espresso shot mixed in most mornings. The profile of Bob also lists “utilitarian” as Bob’s service orientation, so Wesley gets out a medium cup, starts writing “Bob” on it, and says to Bob, “Morning, Mr. Smith. Grande Redeye?” Bob nods, holds up his Starbucks payment app to the scanner, and the transaction is done.