DELIGHTFUL OR DEPENDABLE?

VARIABILITY OF CUSTOMER EXPERIENCES AS A PREDICTOR OF CUSTOMER VALUE

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WCAI Proposal

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Abstract

Is it preferable for a company to occasionally surprise its customers with exceptional service (i.e., delight customers) or to strive for consistency in service across time and space (i.e., be dependable)? This proposal investigates the extent to which variability in service encounters affects future customer satisfaction, likelihood of upselling, and customer value. Drawing from the expectations and service quality literatures, we develop a model that includes three potential types of variability in a customer-company relationship: (1) each customer's historical satisfaction with Hertz, (2) employee's satisfaction at a Hertz site, and (3) other customers' recent satisfaction levels at a Hertz site. By examining both satisfaction and variability of satisfaction, this research contributes to the literature by providing a nuanced picture of the link between satisfaction and customer value. For managers, the research will help determine whether to allocate scarce resources to exceptional or consistent service quality; for example, should incentives be given to the best (i.e., exceptional employees) or to those who are the most consistent within the site and company?

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Introduction

The current mantra at many companies is to "delight" customers by surprising them with a great experience. Such a view would predict that punctuating a series of experiences with a few exceptional encounters will lead customers to deepen their relationship with the company. This will occur because the delightful experience will make service quality more salient and greatly exceed prior expectations (Rust and Oliver 2000). In contrast, some brand management theorists (Barwise and Meehan 2010) point to the importance of reliably delivering on a brand's promises to customers. They predict that a company that achieves such consistency is best positioned to have customers deepen the customer-company relationship.

This research asks whether it is preferable – from Hertz' perspective – for customers to have a few exceptional experiences (i.e., delight) or to have more predictable experiences with the brand (i.e., dependability). As a result, it provides a nuanced picture of the link between satisfaction and customer value. The project will also provide guidance to Hertz managers on whether it is better to concentrate on delightful experiences (by say, rewarding employees that provide truly exceptional service) or consistent service quality (by say, concentrating on poorly performing employees and making sure that highly motivated employees act consistently with the brand).

In the following sections, we explain the logic behind our theoretical model and provide an overview of our method for testing the model.

Detailed Project Proposal

The post-encounter satisfaction of a customer is often explained by citing factors such as the quality of service delivered, the quality of service at one site versus another, or the overall friendliness of employees. As a result, many companies strive to enhance customer satisfaction and customer value by improving the average level of service and the average level of employee satisfaction at each site.

But advances in service theory suggest that there may be more to the story. Research on customer expectations points out that satisfaction is constructed when customers compare current service quality with that which was expected based on prior experiences (Boulding et al. 1993; Parasuraman et al. 1994). When current service quality exceeds expectations, expectations are said to be confirmed, but when current service falls short, expectations are said to be disconfirmed. This dynamic view reveals that variability is likely to lead a customer to reassess the relationship because variability is somewhat destabilizing for expectations.

There are at least three types of variability that can influence satisfaction and customer value. Time variability refers to how varied a single customer's encounters with the company have been over a period of time. Employee variability involves variability stemming from the fact that customers can interact with multiple employees in a single encounter with the company. Site variability involves how consistently customers are satisfied at the site.

We now explain each of these types of variability in more depth, providing the theoretical link between variability and customer satisfaction and customer value in each case.

Time variability

Some customers may have very consistent experiences over time, while others may have greater variability, with some positive and some negative experiences. For example, two customers may have a series of encounters that on average are indistinguishable, yet one has had very consistent encounters, while the other has had a series of either very positive or very negative encounters. We ask to what extent the variability of prior experiences affects customer satisfaction and customer value in subsequent periods.

Our expectation is that customer satisfaction and customer value will decrease as variability in prior customer experiences increases. This will occur because, as noted above, prior experiences that differ from each other and from the current experience will lead the customer to continually reassess the customer-company relationship. Such reassessments may encourage the customer to consider alternative offerings at each encounter. As a result, we expect a higher defection rate as variability increases. This prediction is also consistent with decision theory, which holds that customers make purchase decisions based on the extent to which those decisions will reduce uncertainty (e.g., Rust, Inman, Jia and Zahorik 1999).

Employee variability

The internal marketing literature has for decades studied the link between employee satisfaction and customer satisfaction (George 1990; Grönroos 1981). The evidence tends to support a positive and casual link whereby satisfied employees are more likely to deliver excellent service to customers and create high customer satisfaction. However, most of this research examines the effect of average employee satisfaction on customer satisfaction.

In practice, employee satisfaction may vary substantially even within a single worksite, and a single customer may interact with multiple employees in a single transaction. We predict that all other things equal, increases in variability in employee satisfaction will harm customer satisfaction and customer value. This will occur for at least two reasons. First, a customer that encounters two employees with very different levels of satisfaction may receive different service quality. This variability in service will make the transaction less certain and therefore, more risky to the customer. Second, highly satisfied and dissatisfied workers may be less likely to cooperate with one another because their goals may differ substantially. This will create a relatively negative service climate or employees' shared perceptions of

the practices, which, in turn, will lead to decreased customer satisfaction (e.g., Salanova, Agut, and Peiro 2005).

Site variability

We finally propose that a site with more varied customer satisfaction will create lower customer values than a site with more consistent customer satisfaction, although the two sites might have similar average customer satisfaction. This is because with service variability, those dissatisfied customers are more likely to engage in word of mouth, which, in turn, will result in lowered profitability (Anderson 1998). Furthermore, mixed customer experience might reflect varied employee satisfaction levels, which, as discussed earlier, also influence customer values negatively.

Insert Figure 1 About Here

Model Sketch

We plan to answer this question by examining the effects of both average satisfaction as well as uncertainty in satisfaction levels on future customer satisfaction, customer upselling, and customer value. The unique data set allows us to measure both average satisfaction levels and variance in satisfaction using three difference sources: (1) each customer's historical satisfaction with Hertz, (2) other customers' recent satisfaction levels with the same site, and (3) employee's satisfaction with Hertz at the chosen site. Figure 1 summarizes our proposed model.

We focus on predicting future transactions and customer satisfaction for the Hertz loyalty card members (for which there exist longitudinal data). The setting is non-contractual: at some point in time that is unobserved by the firm, customers may become inactive. Hence, the attrition process is latent and must be inferred from prior activity (Kumar and Reinartz 2006). The intuition is that a lapse in transactions may be due either to an active but infrequent customer, or a customer who has irreversibly defected. We start with a discrete time latent attrition model (e.g., Fader, Hardie and Shang 2010) that probabilistically characterizes customers as either active or inactive and extend it in two ways.

First, we specify the time-varying transition probability that customer *i* remains active after month *t* (p_{it}) as a function of the independent variables of interest – the average and variance of previously experienced satisfaction levels of customer *i*, the average and variance of employee satisfaction levels at the site most recently visited by customer *i*, and the average and variance of satisfaction levels at the site reported by customers other than *i*.

$$p_{it} = f\left(AvgSAT_{it}, VarSAT_{it}, AvgESAT_{is[t]}, VarESAT_{is[t]}, AvgCSAT_{is[t]}, VarCSAT_{is[t]}\right)$$

We may specify some of these independent variables as stock variables to account for the stronger weight placed on more recent experiences (e.g., Bolton 1998). Furthermore, we may specify that responses differ by valence or levels, to accommodate asymmetric effects for positive vs. negative satisfaction shocks, or possible "zones of indifference" (e.g., Oliver 1997). To incorporate unobserved

heterogeneity in the response of remaining active to these variables we intend to use latent classes or a hierarchical Bayes procedure.

Secondly, for active customers, we model several events related to the "standard" probability of conducting a transaction. Conditional on a customer making a transaction, we can model the transaction amount, whether there was any "upselling" (defined in the presentation), whether the customer decided to give a satisfaction score, and, conditional on providing the score, the score itself. It is desirable to allow these decisions to be related; for example upselling may be associated with lower satisfaction ratings, or, not providing a satisfaction response. We intend to link all these decisions is using a Gaussian copula approach (Danaher and Smith 2011), which links the marginal distributions.

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Biographies

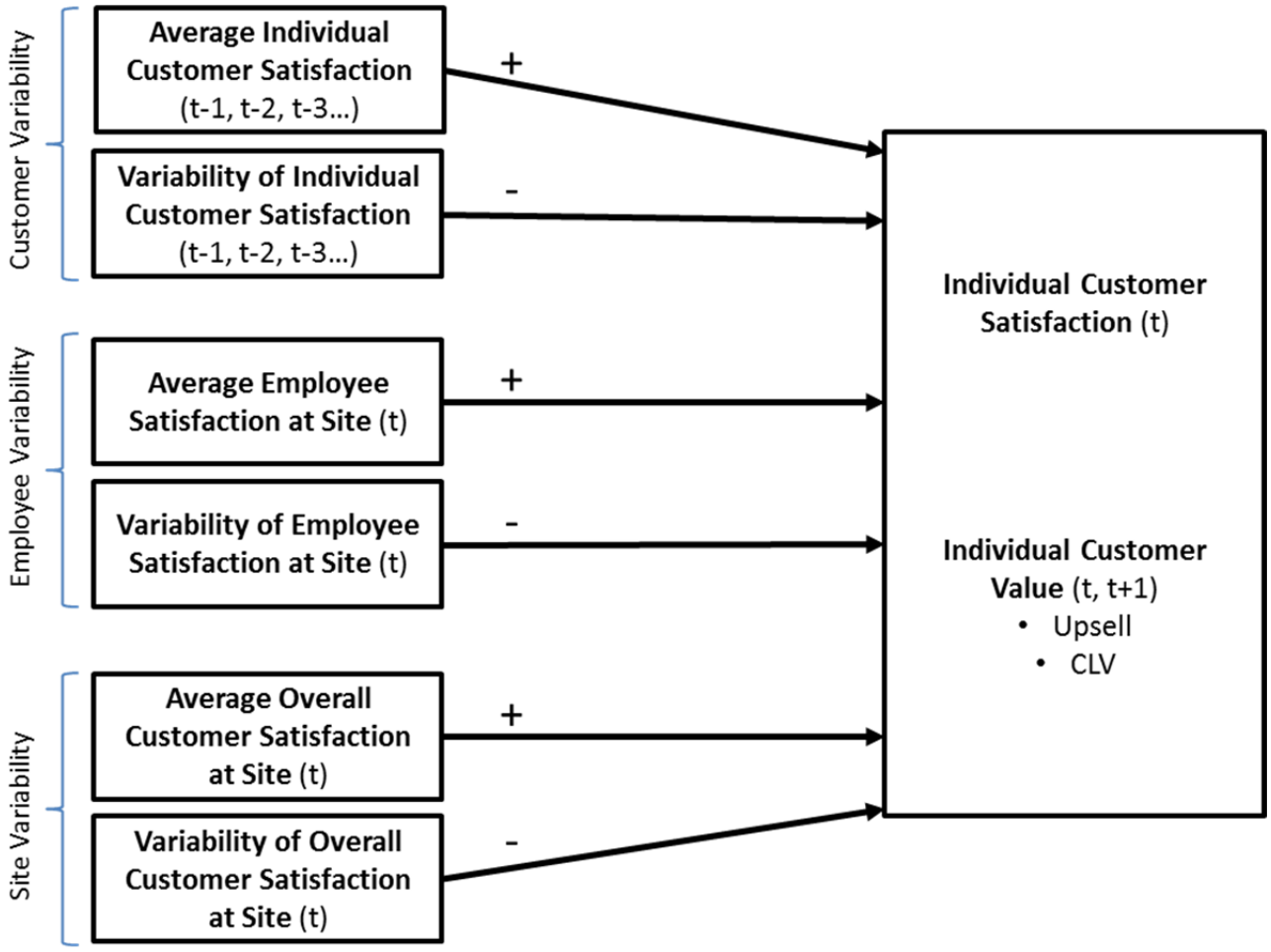
Yanliu Huang is Assistant Professor of Marketing at LeBow College of Business, Drexel University. Her research interests focus on consumer decision making including in-store shopper marketing, consumer planning/learning/memory, and health marketing. She will bring to this project the expertise on consumer behavior and consumer decision making process.

George Knox is Assistant Professor of Marketing at LeBow College of Business, Drexel University. His research interests are customer relationship management, marketing effectiveness, and in-store retailing. He will bring the modeling and data analysis expertise to the project.

Daniel Korschun is Assistant Professor of Marketing at LeBow College of Business, Drexel University. His research is on corporate social responsibility (CSR), with a recent emphasis on how CSR motivates employees to serve customer needs. He brings expertise on internal marketing and customer orientation.

Figure 1

Conceptual Framework



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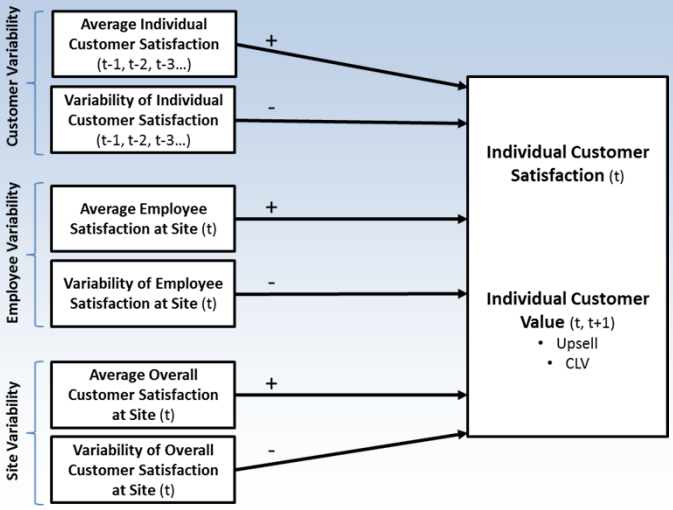
OVERVIEW

Is it preferable for Hertz to occasionally **surprise** its customers with exceptional service (i.e., delight customers) or to strive for **consistency** in service across time and space (i.e., be dependable)?

Professors Yanliu Huang, George Knox, and Daniel Korschun (Drexel University) quantify the effects of variability on customer satisfaction, upsell potential, and customer lifetime value.

This unique dataset enables the researchers to examine three types of variability:

- **Customer variability**: variability of a customer's historical satisfaction with Hertz
- **Employee variability:** variability of employees' satisfaction at a Hertz site
- **Site Variability**: variability of other customers' recent satisfaction level at a Hertz site



MANAGERIAL IMPLICATIONS

- Reach out to customers with variable (but on average good) service, as well as those who received poor service
- Reward employees for consistency versus exceptional service
- Track consistency at each site (in addition to overall satisfaction)

MODEL MECHANICS

We propose a latent attrition model where customers may become irreversibly inactive at some point in time. We make the transition probability from being an active customer to an inactive one as a function of our six main drivers of interest (see Figure above):

$$p_{it} = f\left(AvgSAT_{it}, VarSAT_{it}, AvgESAT_{is[t]}, VarESAT_{is[t]}, AvgCSAT_{is[t]}, VarCSAT_{is[t]}\right)$$

Behaviors (and perceptions) while active are linked via a Gaussian copula.

Wharton University of Pennsylvania

users • listeners • fans • donors • viewers • households • shoppers • sellers • readers • browsers • friends • followers
travelers • patients • contributors • attendees • readers • subscribers • buyers • clients • visitors • guests • customers

WHARTON CUSTOMER ANALYTICS INITIATIVE