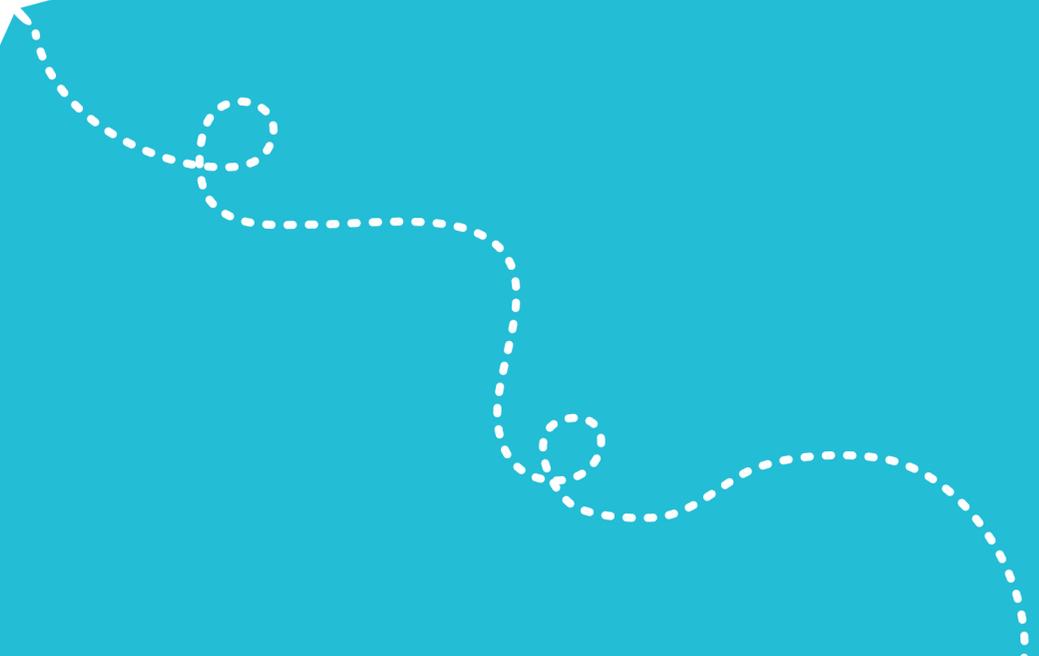




DESIGNING TO SERVE

An Examination of WestJet's Domestic Check-in Space



By: Jaime Stopa

Enter

MPC Major Research Paper

DESIGNINGTOSERVE

An Examination of WestJet's Domestic Check-in Space

The Major Research Paper is submitted in partial fulfillment of the requirements for the degree of Master of Professional Communication

Ryerson University
Toronto, Ontario, Canada
July 19, 2012

By: Jaime Stopa
Student ID:
Supervisor: Dr. Janice Fung

Declaration for Electronic Submission of a Major Research Paper

I hereby declare that I am the sole author of this Major Research Paper (MRP) and the accompanying Research Poster. This is a true copy of the MRP and the Research Poster, including any required final revisions, as accepted by my examiners.

I authorize Ryerson University to lend this MRP and/or Research Poster to other institutions or individuals for the purpose of scholarly research.

I further authorize Ryerson University to reproduce this MRP and/or Research Poster by photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research.

I understand that my MRP and/or my Research Poster may be made electronically available to the public.



Acknowledgments

I would like to thank my friends and family for supporting me through this process, my lovely dog Olivia for keeping me sane and getting me out of the house, and both my research supervisor, Dr. Janice Fung and second reader, Dr. Catherine Schryer for reviewing my MRP countless times and providing me with constructive criticism and insightful suggestions to make my final product stronger. Lastly, I would like to thank WestJet for helping me to make my MRP topic reality.

Dedication

I would like to dedicate this MRP to my parents, who have always supported and encouraged me throughout my academic career and who have instilled education as a top priority in my life.

Table of Contents

1. Abstract	VI
2. Introduction	1
2.1 MRP Topic Overview	1
2.2 Importance to WestJet	2
2.3 Relevance to Professional Communication	2
2.4 Research Context	3
2.5 Selective Literature Review	3
3. Methodology	7
3.1 Research Questions	8
3.2 Operational Definitions	8
3.3 Data Collection	9
3.3.1 Interviews	10
3.3.2 Observations	13
4. Results	15
4.1 Interviews	15
4.2 Observations	17
4.2.1 Desired Customer Behavior 'Route A'	17
4.2.2 Desired Customer Behavior 'Route B'	21
4.2.3 Actual Customer Behavior 'Route A'	21
4.2.4 Actual Customer Behavior 'Route B'	22
5. Data Analysis	22
5a.1 'Route A'	22
5a.1.1 First Touch Point: Self-Service Kiosks	23
5a.1.2 Second Touch Point: Bag Drop Line	30
5a.1.3 Third Touch Point: Bag Drop Counters	32
5a.1.4 Summary of 'Route A'	32



5b.1 'Route B'	33
5b.1.1 First Touch Point: Guest Assistance Line	33
5b.1.2 Second Touch Point: Guest Assistance Counter	34
5b.1.3 Summary of 'Route B'	35
6. Discussion	35
7. Research Limitations	38
8. Conclusion	40
References	41

Appendices

Appendix A: REB Letter of Approval	45
Appendix A-1: Data Collection Schedule and MRP Timeline	46
Appendix A-2: Ryerson University Consent Agreement Form	48
Appendix A-3: Interview Guide	52
Appendix A-4: Interview Transcripts	54
Appendix B: Mapping Service Blueprint	111
Appendix B-1: Desired Customer Behavior 'Route A'	112
Appendix B-2: Actual Customer Behavior 'Route A'	113
Appendix B-3: Desired Customer Behavior 'Route B'	114
Appendix B-4: Actual Customer Behavior 'Route B'	115
Appendix C: Time Analysis of Wait Time and Contact Time 'Route A' and 'Route B'	116
Appendix C-1: Customer Behavior Patterns	120

List of Figures

Figure 1.	Sign '1a'	18
Figure 2.	Images from Instructional Video	18
Figure 3.	Entrance Sign	19
Figure 4.	'Info-1' Sign	20
Figure 5.	'Info-2' Sign	20
Figure 6.	Self-service Kiosk	23

1. Abstract

My major research paper (MRP) focuses on the service design of WestJet's domestic check-in space at Toronto International Pearson Airport. In the context of this micro space, service design refers to all of the touch points or points of contact between the customer and the organization designed into this space. This includes anything that communicates with the customer in this space to direct their behavior. My central research question is: how does the service design of the domestic check-in space at WestJet affect customer behavior? In exploring this question, I examined two main aspects: (1) service design and (2) customer behavior. Service design theory is concerned with managing customers' experience of service quality through the design of services. I observed how customers experienced the service design of the check-in space through their visible behaviors and reconstructed a service blueprint or map of each step in the check-in service with which to track these behaviors. This allowed me to identify variances between customers' actual behaviors and the desired customer behaviors in the check-in space. I also conducted a series of interviews with select WestJet employees to understand the service objectives of the check-in space and the strategic objectives of the organization. An analysis of the self-service route of the check-in space indicates that some sub-touch points are not positioned at natural decision points for customers. This is despite the fact that the sub-touch points are designed to supply customers with information to make decisions at each major touch point in the check-in service. Consequently, actual customer behaviors vary from WestJet's desired customer behaviors in the self-service route of the check-in space. These findings suggest that there are nuisances in the design of the check-in service that are impeding WestJet's service objectives and resulting in inconsistent and potentially confusing customer experiences.

2. Introduction

To begin, this paper will provide a brief overview of service design theory, including a selective literature review, a profile of WestJet as an organization, and the importance and professional relevance of this research. This will be followed by an outline of the methodology I used to obtain information about customer behavior at each major touch point or point of contact between the customer and WestJet designed into the check-in space. I will draw from service design, information design, and literature on wayfinding to contextualize my results in terms of the central issue of this paper, which is how the service design of the check-in space affects customer behavior. My subsequent discussion will form a framework on which to base my recommendations for the design of the domestic check-in space. Finally, this paper will conclude with a summary of my major findings and research limitations, which will point toward areas of future research.

2.1 MRP Topic Overview

I examined the design of a service by analyzing WestJet's domestic check-in space at Toronto International Pearson airport. Thus, my major research paper (MRP) focuses on service design in the context of this micro space. The design of a service is of chief importance to manage the customer's experience (Meyer & Schwager, 2007). Therefore, service design requires an understanding of how a customer interacts with and perceives an organization through its service touch points or points of contact with the organization (Meyer & Schwager, 2007). Subsequently, service design is twofold in that it shapes customer behavior by managing customer experiences and is shaped through customer experiences of service encounters (Meyer & Schwager, 2007).

Service design requires an understanding of how a customer interacts with and perceives an organization through its service touch points or points of contact with the organization.

2.2 Importance to WestJet

Services are intangible and customers rely on service touch points or tangible points of contact to infer service quality (Bitner, 1992). Hence, customers' perceived quality of service is a direct function of how the service is designed. The customer's inability to process information in the check-in space results in service inefficiencies for the customer in the form of longer wait times, contact time, and cycle time, all of which reduce customer satisfaction. In effect, the root of most service inefficiencies is the "lack of systematic design and control" (Shostack, 1984, p. 132). To meet its service objectives, WestJet needs to understand how customers interact with and perceive the organization through the design of its services (Meyer & Schwager, 2007). This means that the organization needs a method to evaluate its services, which highlights the importance of this MRP. In my MRP, I developed a service blueprint with which to evaluate WestJet's domestic check-in service in terms of customers' behaviors and experiences of service quality. For a definition of a service blueprint, refer to the **Literature Review** section on p. 3.

2.3 Relevance to Professional Communication

In looking at service design as a series of touch points between a service provider and customer, I investigated how service-based organizations communicate their value proposition to customers through the design of their services. Equally, Bitner (1992) suggests that the design of a service is a "visual metaphor for an organization's total [service] offering" (p. 67). Hence, it is important that service-based organizations design visual, tangible, touch points to outwardly communicate their service quality and manage their impression for customers. In examining how the service design of the check-in space at WestJet affects customer behaviors, I identified the communication strategies WestJet employs to deliver its customer service and add value to the customer.

2.4 Research Context

WestJet is a major Canadian airline with a competitive cost leadership strategy. As a service-based organization, WestJet's primary concern is attracting and retaining customers. Consequently, the organization takes every opportunity to improve its customer service. The check-in space is the first point of contact between the customer and the organization during actual service. It is also an opportunity for WestJet to establish a positive relationship with the customer. The service objective of the check-in space at WestJet then is to satisfy customers by providing them with efficient service to encourage their repeat business.

The site of my research was WestJet's domestic check-in space at Toronto International Pearson airport. I chose to observe WestJet's domestic space because as a major Canadian airline, WestJet has more decision-making authority over the design of its check-in space(s) in Canada. This factor is important because it means that WestJet has the opportunity to manage the customer's experience of service quality through the design of its domestic check-in service (Meyer & Schwager, 2007).

2.5 Selective Literature Review

Bitner (1992) was one of the first scholars to suggest that the built environment containing a service can enable or constrain an organization's ability to meet its service objectives. This idea, which stemmed from environmental psychology, became the root of service design theory. In *Servicescapes: The Impact of Physical Surroundings on Customers and Employees*, Bitner (1992) argues that the 'servicescape' or design of a service plays three strategic roles for service-based organizations: it acts as a tangible indicator of service quality for customers, it communicates to customers how to behave, and finally, it serves as a mode of differentiation from competitors. Bitner (1992) maintains that in practice, direct observation of the effect of built service environments on customer behaviors is the best method for developing further theoretical propositions on the design of services. Bitner's (1992) article provides impetus for the field of service design.

The principle researcher in the field of service design is Shostack. Her founding works include: *How to Design a Service* (1982), *Designing Services that Deliver* (1984), and *Service Positioning through Structural Change* (1987). In these works, Shostack introduces ideas that are central to the study of service design. A *service blueprint* is a conceptual map outlining every step in a service process (Shostack, 1982). In effect, a service blueprint measures the efficiency of a service in terms of its design (Shostack, 1982). For Shostack (1982), efficiency is a measure of potential service as compared to actual service. A *potential service* refers to the expected steps in a service process whereas the *actual service* refers to the existing steps in a service process (Shostack, 1982). A service blueprint maps out the potential service at each step in the process in terms of measurable factors such as the expected speed of delivery and number of tasks (Shostack, 1982). The service blueprint is then used as a standard with which to compare such factors during actual service. *Deviance* occurs when the actual service varies from the potential service in terms of measurable factors listed in the service blueprint (Shostack, 1982). According to Shostack (1982), the importance of service blueprinting is that it provides a measurable way to evaluate the design of a service, which organizations can use to reach specific service objectives.

Yet, perhaps the greater significance of service blueprinting is its ability to improve the quality of service delivery to the customer (Randall, 1993). In her article, *Perceptual Blueprinting*, Randall (1993) discusses 'perceptual blueprinting' or service blueprinting from the perspective of the customer. Namely, she advocates mapping each step in the service process in terms of the touch points or points of contact between the customer and the organization (Randall, 1993). In doing so, Randall (1993) maintains that organizations can understand how their customers experience a service from beginning to end. To evaluate the design of a service then is to measure the variance between the customer's expectations and experiences of service quality (Meyer & Schwager, 2007). In perceptual blueprinting, deviances are identified as 'failpoints' in a service's design whereby the quality of a service fails to meet the customer's expectations (Randall, 1993).

Randall's (1993) focus on the customer parallels the emerging shift in service design toward customer experience management (CEM). While the goal of service design is the same, to maximize the efficiency of a transaction between a service provider and customer, the definition of efficiency has changed to reflect this shift. Efficiency is now defined as the measure of a customer's expectations as compared to actual experiences of service quality (Meyer & Schwager, 2007). In *Understanding Customer Experience*, Meyer and Schwager (2007) argue that CEM is especially important to organizations whose main value proposition is their service offering. The ability of a service-based organization to meet customer expectations results in customer satisfaction and repeat business (Meyer & Schwager, 2007). Meyer and Schwager (2007) view services as intangible goods with tangible points of contact between a service provider and customer. In understanding services this way, the authors conceive of service design as customer experience design in that the customer is at the center of a service offering (Zomerdijk & Voss, 2010).

Equally, Zomerdijk and Voss (2010) suggest that the goal of service design is to create what they term an 'experience-centric service' for the customer. In *Service Design for Experience-Centric Services*, the authors argue that services should be conceptualized as points of connection versus contact between a service provider and customer (Zomerdijk & Voss, 2010). In effect, Zomerdijk and Voss (2010) maintain that when customers connect with a service they are more likely to engage in repeat business. The authors outline six (6) propositions for designing an 'experience-centric service'. Some of the propositions include: (1) sensory design or the process of designing visual, tactile, and/or auditory elements into a service to influence customer behavior, (2) designing spatial layouts that enable opportunities for service providers and customers to interact, and (3) integrating backstage and frontstage operations (Zomerdijk & Voss, 2010). Zomerdijk and Voss' (2010) propositions exemplify how service design is no longer concerned with analyzing a service as a step-by-step process but rather as a series of relationships between a service provider and customer.

The service blueprint has evolved to reflect the new direction of service design. In *Service Blueprinting: A Practical Technique for Service Innovation*, Bitner, Ostrom, and Morgan (2008) outline the typical components of a modern service blueprint. These components include customer actions, frontstage or visible operations to the customer, backstage or invisible operations to the customer including support processes, and tangible elements of the service design including but not limited to staff, signage, and layout (Bitner et al., 2008, p. 72). The service blueprint has become customer-centered in that it maps a service from the point of view of the customer (Bitner et al., 2008).

The service blueprint has become customer-centered in that it maps a service from the point of view of the customer.

In *Designing Multi-Interface Service Experiences: The Service Experience Blueprint*, Patrício, Fisk, and Falcão e Cunha (2008) expand on the customer-centered blueprint to include the integration of technology into “modern service offerings” (p. 319). Technologies add multiple points of contact to a service, which creates new opportunities to serve customers’ needs but dramatically changes the service experience. The authors developed a service experience blueprint as a method to design for customers’ experiences with multi-interface services (Patrício et al., 2008). Patrício et al. (2008) specify three stages in developing a service experience blueprint: the first stage involves assessing customer experience requirements (CERs) against each step in a service process to determine which steps can be automated without sacrificing value for customers and the organization; the second stage looks at how to design technology into the service process to satisfy these CERs; finally, in the third stage, the design is executed and closely monitored to gauge whether it enhances service delivery. The service experience blueprint is a departure from early service design methods because it positions the customer as a co-creator of value within a service encounter (Patrício et al., 2008).

Clatworthy (2012) takes service design one-step further by aligning customer experience to brand strategy. In *Bridging the Gap between Brand Strategy and Customer Experience*, Clatworthy (2012) advocates that service-based

organizations should design for customer experiences that adhere to their brand promise. He uses the semantic transformation model, which he reinterpreted through a service perspective from a previous scholar (Karjalainen, 2004) as a method to align brand strategy with service design. Clatworthy's (2012) semantic transformation model describes the process whereby a brand is communicated and translated across all the touch points of a service. Each tangible point of contact in a service then becomes part of the organization's brand strategy. Employees, for example, become brand ambassadors who enact the brand personality through their behaviors (Clatworthy, 2012). Clatworthy (2012) outlines three stages for the semantic transformation of services. In the first stage, the brand is articulated and defined. In the second stage, strategies for communicating the brand across service touch points are explored. In the final stage, the service experience is prototyped using a combination of methods including a service experience blueprint. The semantic transformation of services is the first model to establish a "link between customer experience, the brand and the design process" (Clatworthy, 2012, p. 110) and marks an endpoint in the progression of the service design field to date.

3. Methodology

In this section, I will outline how I put the field of service design into practice for my MRP. It is important to note that service design theory consists of research about methods and processes; researchers in the field theorize design prototypes for service innovation at the design stage of a service (Bitner et al., 2008). At the same time, these researchers acknowledge that service design "requires an understanding of the customer outcome [or]...the way the customer experience unfolds over time" (Bitner et al., 2008, p. 70) following the launch of a service. However, the link between theory, methods, and practice is weak. Since the domestic check-in service is already active, my intent was to analyze the customer experience by observing customers' visible behaviors in the check-in space. I observed how all of the design features that WestJet controls to achieve its service objectives communicated with customers to direct their behaviors. Having uncovered nuisances in the design that impeded such objectives (Bitner, 1992), I consulted design prototypes of service

blueprints in the literature to offer solutions to the service process. Specifically, I conducted a post-evaluation of what is proposed in the literature by reconstructing a service blueprint of the domestic check-in service. The service blueprint helped me to identify the desired customer behaviors in this space, which I compared to actual (observed) customer behaviors during service. I then used the variances I pinpointed between desired and actual customer behaviors to support my recommendations to modify the service design of the check-in space (Shostack, 1982).

3.1 Research Questions

My central research question was: *how does the service design of the domestic check-in space at WestJet affect customer behavior?* In exploring my central research question, I looked at two main aspects: (1) the service design of the check-in space and (2) customer behavior. By service design I am referring to all of the touch points or points of contact between the customer and the organization designed into this space. These include, signage, videos, equipment, furniture, layout, branding, and employees. I observed customer behavior in this space to examine how these touch points communicate with the customer to meet WestJet's service objectives. Additionally, some of the sub-questions I investigated are: how do customers' actual behaviors differ from WestJet's desired customer behaviors in the check-in space? What are the service objectives of the check-in space at WestJet? How is the check-in space designed to achieve WestJet's service objectives?

3.2 Operational Definitions

To understand how the service design of the domestic check-in space at WestJet affects customer behavior, it is important to identify what customer behaviors are desirable for WestJet to meet its service objectives. On a basic level, the service objective of the check-in space is to satisfy customers by providing them with efficient service to encourage their repeat business. Thus, the service design of the check-in space "must contain all of the necessary information for [customers] to make and execute decisions" (Arthur & Passini, 1992, p. 45) to move from the

beginning to the end of the service efficiently. Subsequently, each touch point or point of contact designed between the customer and the organization becomes a decision point for the customer (Arthur & Passini, 1992). In this way, the service design of the check-in space facilitates the execution of decisions into desirable customer behaviors (Passini, 1984). This is known as *architectural legibility* or the extent to which the design of an environment is understood by its users and instructs them how to behave (Weisman, 1981). In the context of this MRP, 'users' refer to 'customers'.

Each touch point or point of contact designed between the customer and the organization becomes a decision point for the customer.

To make decisions about how to behave in the check-in space, customers engage in *wayfinding* or "spatial problem solving" (Arthur & Passini, 1992, p. 25). Specifically, customers form a *cognitive map* or mental representation of the design of the check-in service from beginning to end. A cognitive map helps customers to create an action plan to reach their end destination, which is to complete the service transaction, by processing available information in the check-in space (Arthur & Passini, 1992). In executing an action plan, customers make many decisions on how to behave to complete the service transaction. The fewer decisions customers have to make, the more efficient or architecturally legible the design of the check-in service is (Arthur & Passini, 1992). Cognitive maps are made visible through customer behaviors because such behaviors are the result of decisions executed in the customer's action plan. Architectural legibility is visible when customers behave in ways that WestJet desires them to behave in the check-in space, in other words, when the design features of the check-in space aide customers in creating a cognitive map that matches the service blueprint (O'Neill, 1991).

3.3 Data Collection

To collect data for my MRP, I performed a total of four interviews and three observations. Rather than analyze the interviews, I summarized and referred to the interview transcripts to provide me with context for the service design and mapping

analysis, which occurred during my observations. I also took photographs of all the touch points in the check-in space to provide me with a visual reference for my analysis. Other than the photographs, I did not collect any material documents from WestJet to use in my analysis of the check-in space, as the space itself is information rich and complex. I received research ethics board (REB) approval for all data collection methods. Please refer to [Appendix A](#) on p. 45 to see the REB letter of approval. For a data collection schedule and MRP timeline, refer to [Appendix A-1](#) on p. 46.

3.3.1 Interviews

I chose to interview four employees from WestJet, the Director of International Operations, the Senior Analyst of Operations Research, the Senior Manager of Operations Research, and the Director of Planning and Support. On Sunday, March 4, 2012, I interviewed the Director of International Operations at WestJet. The Director of International Operations oversees all of WestJet's airport operations across multiple bases in Canada and internationally. In particular, she monitors customer service quality within these bases. She has been at WestJet since its inception and spearheaded the organization's transition to self-service in its check-in spaces. The Director of International Operations provides a unique perspective on how the design of the check-in space(s) has evolved over time. In particular, she supplied me with a macro perspective of the strategic objectives of the check-in space as well as those of WestJet as an organization. In turn, I observed customer behavior to evaluate how the service design of the check-in space communicates with customers to meet these objectives and whether any variance exists.

The Senior Analyst of Operations Research and the Senior Manager of Operations Research provided me with a micro perspective of the strategic objectives of the check-in space. I interviewed the Senior Analyst of Operations Research, on Friday, April 20, 2012. He is responsible for designing layouts for the check-in space using systems design software. The software enables him to simulate the effect of different designs on customer behaviors and identify potential

bottlenecks in the service design of the check-in space. He plays a strategic role by drafting and testing design plans in order to meet WestJet's service objectives. The Senior Analyst of Operations Research provided me with a critical analysis of the check-in space, by identifying the strategic rationale behind the design of each step in the check-in service. In learning how the check-in space is designed, I understood how customers are meant to behave or how WestJet desires them to behave. This helped me to reconstruct a service blueprint of the domestic check-in space with which to compare actual customer behaviors during service.

The Senior Manager of Operations Research designs and conducts research studies for WestJet to evaluate the value of its existing and forecasted business processes. Specifically, he collects and analyzes data on the performance of check-in spaces across bases and suggests resolutions to existing problems. Based on his recommendations, the Senior Manager of Operations Research oversees the development of computer models, which simulate the ability of different design configurations to meet WestJet's service objectives in the check-in space. He provided me with an in-depth analysis of the design of the check-in space helping me to understand the decision-making and stakeholders involved in this process. Additionally, he provided me with a future outlook for the organization. In turn, I observed customer behavior in the check-in space to explore whether the current design enables WestJet to meet its objectives. I then analyzed the design of the check-in space to identify existing variances. Based on the model of the future, I assessed whether these variances would be addressed and offered my recommendations to WestJet.

I interviewed the Director of Planning and Support, on Friday, April 20, 2012. The Director of Planning and Support oversees the entire design process of the check-in space. In particular, he canvasses the needs of internal and external stakeholders of this space into a design plan to meet WestJet's service objectives. He provided me with a strategic overview of the potential service process in terms of operational performance metrics like cost benefit analyses, profit analyses, and time targets, which he uses as a benchmark to evaluate the actual service. Variances

identified between the actual service and potential service are then reassessed through computer simulations by the Operations Research team. For the purposes of my MRP, I used these performance metrics as a guide to conduct my own evaluation of the actual check-in service.

I used email to initiate contact with the interviewees and to send them the consent form to read and sign prior to the interview (see [Appendix A-2](#) on p. 48). As an intern at the real estate department at WestJet, I had a corporate email account, which I used to establish a shared organizational identity and build trust with the interviewees prior to the interview(s). I developed a semi-structured interview guide that included a series of open-ended and probing questions (see [Appendix A-3](#) on p. 52). The interview guide was designed to be thirty minutes and was organized by topic, to provide me with the flexibility to focus on select areas as I saw fit during the interviews.

In the introduction stage of the interview, I asked permission from the interviewees to record the interview. I chose to record all of my interviews for the following reasons: recording enables me to concentrate more closely on what is being said and creates more opportunities for probing, and it provides me with a storable and accurate record of the interview for later reference (Stewart & Cash, 2008). All of my interviewees are based out of Calgary, Alberta, yet I had the opportunity to interview the Senior Analyst of Operations Research, the Senior Manager of Operations Research, and the Director of Planning and Support face-to-face at WestJet's corporate headquarters while visiting the city. I booked a conference room to conduct the interviews in and I recorded the interviews using GarageBand software on my laptop. The range of social cues available in the face-to-face interviews enabled me to create a sense of personal connection and/or intimacy with my interviewees. As a result, the interviewees became invested in my research by disclosing potentially more revealing information (Opdenakker, 2006).

To address the issue of geographical access with the remaining interviewee, the Director of International Operations, I conducted a phone interview. I put the Director of International Operations on speakerphone and recorded our interview

using GarageBand software on my laptop. I chose to use the phone for the following reasons: I could establish a personal presence with my interviewee over the phone, the interviewee's responses would not be stored in an email inbox where they are potentially accessible to administrators, I could pre-arrange to hold the interview in a private conference room to eliminate background noise, and the phone is a synchronous medium that facilitates ongoing communication (Opdenakker, 2006).

3.3.2 Observations

I conducted a pilot observation on Wednesday, February 29, 2012 from 12:30-3:30PM. I conducted a second observation on Monday, March 26, 2012 from 1-4PM, and I conducted the third observation on Monday, April 2, 2012 from 1-4PM. I observed during moderately busy hours between 12:00-3:00PM, Monday to Friday. I observed for a period of three hours each time since this proved to be an adequate amount of time for data collection in the pilot observation. On all occasions, I wore a WestJet identification card and carried a clipboard to make my presence official in this space.

My mode of evaluation was to create a service blueprint to map the touch points or points of contact designed into this space between the customer and WestJet (see **Appendix B** on p. 111). A service blueprint is a conceptual map outlining every step in a service process (Shostack, 1982). The service blueprint is customer-centered in that it attempts to map a service from beginning to end from the point of view of the customer (Bitner et al., 2008). That is, it includes all aspects of the service design that are visible to the customer.

The purpose of a service blueprint is to "plan for [customers'] behavior in the real setting" (Passini, 1996, p. 321), which, in this case, is the check-in space. This is important because customers produce their own cognitive maps or mental representations of the check-in space to plan their behaviors from the beginning to the end of the service (Arthur & Passini, 1992). A service blueprint therefore maps out the potential service or the desired customer behaviors at each step in the service process whereas the cognitive map represents the actual customer behaviors at each step in the service process (Shostack, 1982).

A service blueprint...maps out the potential service or the desired customer behaviors at each step in the service process whereas the cognitive map represents the actual customer behaviors at each step in the service process.

I observed how the service touch points communicated with customers to help them make decisions about how to behave in this space, and I traced these behaviors on my service blueprint. In doing so, I was evaluating the extent to which customers' actual behaviors varied from the desired customer behaviors at each major touch point in 'Route A' and 'Route B' of the check-in space (Shostack, 1982).

I used a set of methods to measure customer behavior in the check-in space. I conducted a time analysis using a stopwatch to measure customer wait time and customer contact time with a WestJet employee at each major touch point in 'Route A' and 'Route B' (see [Appendix C](#) on p. 116). The time analysis helped me to identify potential bottlenecks in the service design or touch points within the check-in service that result in service inefficiencies for the customer. These included longer queue times or cycle time, which I used to explain variances that occurred between actual and desired customer behaviors. Additionally, I counted the number of customers in a one-hour period that successfully completed 'Route A' or the self-service route without the assistance of a WestJet employee, the number of customers that required assistance in 'Route A', and the number of customers that bypassed the self-service route altogether in favor of 'Route B' or the guest assistance route. I then compared these numbers to the total number of customers passing through the entrance during this time period to derive an approximate percentage for the occurrence of each behavior. These percentages allowed me to quantify recurring patterns in customer behavior in my analysis (see [Appendix C-1](#) on p. 120).

4. Results

4.1 Interviews (see Appendix A-4 on p. 54 for interview transcripts)

The Director of International Operations explained how, as part of its competitive cost leadership strategy, WestJet is transitioning to a self-service model in its check-in space(s). The self-service model is targeted toward business customers, whose priority is to “ge[t] to the gate, ge[t] on their flight, and ge[t] to their meeting on time” (Director of International Operations, personal communication, March 4, 2012). That said the self-service model is open to all customers. The self-service model is built around the fact that customers want less contact time, wait time, and cycle time in the check-in service. To facilitate the transition to self-service for customers, WestJet is restructuring its labor force from customer service agents to guest ambassadors. The role of the guest ambassadors is to circulate and guide customers through the self-service route from beginning to end, which is in contrast to “the traditional behind the counter model” (Director of International Operations, personal communication, March 4, 2012) where customer service agents remain stationary. The shift to guest ambassadors also reduces the cost of labor for WestJet, as self-service minimizes the ratio of employees needed to customers in the check-in space. These key points from my interview with the Director of International Operations reveal how the self-service model is designed to meet the strategic objectives of WestJet by reducing the organization’s operating costs and streamlining the check-in service.

The Senior Analyst of Operations Research and the Senior Manager of Operations Research explained the process WestJet undergoes in designing its check-in spaces across airports. The Operations Research team works in collaboration with Guest Services, airport management, and frontline staff to determine the optimal level of resource requirements needed to meet service targets at each check-in space. This involves identifying value-added resources to keep capital costs low, which ultimately results in a lower-cost product for the customer. The Operations Research team does not make decisions; they collect data on service times at check-in for each airport base and incorporate this data into computer models to

develop a risk profile of different service targets. The risk profile then supports managerial decision-making by visually representing resource trade-offs. The computer models allow management to “make optimal decisions in a very inexpensive way rather than trying to experiment in the real world, which is always time consuming and expensive” (Senior Manager of Operations Research, personal communication, April 20, 2012).

The Operations Research team classifies customers based on their use behaviors, such as whether they checked-in online, in-person with a customer service agent, or at a self-service kiosk, versus their demographics, such as whether they are a business traveler or leisure traveler. The computer model then incorporates these behavior patterns under different design configurations to help management understand how customers interact with the service. In effect, the computer model produces an internal service blueprint of the check-in space by simulating the impact of the service design, and all of its touch points from beginning to end, on the customer. My MRP forms an independent assessment of the service design of WestJet’s domestic check-in space that is modeled after the organization’s internal processes, including its customer classification scheme.

The Director of Planning and Support discussed how the learning curve for customers new to self-service is steep. Hence, WestJet’s main challenge in maintaining service quality is preparing inexperienced customers for the transition to self-service. Check-in is a high anxiety process for customers because they have a limited timeframe with which to make and execute many decisions to move from the beginning to the end of the service efficiently. This makes it imperative for WestJet to manage customers’ experiences with self-service through the design of its check-in service.

By adding online touch points during the pre-service period, like mobile check-in and web accessible instructional materials, WestJet will “put more information in [customers’] hands before they even check-in to help them ease their anxiety level” (Director of Planning and Support, personal communication, April 20, 2012). Additionally, WestJet aims to reduce the self-service learning

curve by adding more guest ambassadors to train customers how to behave and by simplifying the user-application on the self-service kiosks. Finally, WestJet is removing check-in from its vernacular in the guest assistance route to draw customers to newer modes of checking-in such as via online and mobile technology (Director of Planning and Support, personal communication, April 20, 2012). Thus, WestJet executes its own set of decisions for customers at each touch point in the check-in service to get them on board with the process. Equally, customer survey results indicate that customers' experience positively increases as a function of repeat exposure to self-service. My interview with the Director of Planning and Support exemplifies how self-service is a balance between achieving particular performance metrics to satisfy WestJet's cost requirements without sacrificing customers' experience of service quality.

4.2 Observations

4.2.1 Desired Customer Behavior 'Route A' (see [Appendix B-1](#) on p. 112)

The layout of the check-in space is designed with two separate routes that a customer can take. In 'Route A' or the self-service route, the customer proceeds to the self-service kiosks, where they print their own boarding pass and bag tag, and self-tag their bag(s). The self-service kiosks are designed as the first touch point or point of contact for the customer. The second touch point is the bag drop line, where the customer waits to drop their bag off at a counter. The third touch point is the bag drop counter, where the customer proceeds to a counter and drops their bag off, then exits.

Within 'Route A' there are multiple sub-touch points to supply customers with information to make a decision at each major touch point in the self-service route. These include video displays, signage, and employees.

There is directional signage, for example, to guide the customer through 'Route A'. '1a' represents a sign directing customers to use the self-service kiosks to check-in and to refer to the video displays located on the self-service kiosks.



Figure 1. Sign '1a'. Reproduced with permission from WestJet (2012).

The video displays feature an instructional video to direct customers to print their boarding pass and bag tag, and self-tag their own bags using the self-service kiosks.



Figure 2. Images from Instructional Video. Reproduced with permission from WestJet (2012).

There are also multiple sub-touch points that exist to direct customers to make decisions in either route. The 'enter' sign, for example, provides customers with two options, they can enter to the right, represented in my mapping service blueprint by '2a', if they have completed the first touch point in 'Route A' or they can enter to the left, represented by '1b', to complete the first touch point in 'Route B' (see [Appendix B](#) on p. 111).



Figure 3. Entrance Sign. Reproduced with permission from WestJet (2012).

A guest ambassador stands at the mouth of the entrance to aid the customer in their decision-making by directing them to either route. Branding is used to define the parameters of WestJet's check-in space for customers.

Within the check-in space as a whole, the WestJet logo is present on the interchangeable video displays, the stanchions, the employee uniforms, and all of the signage. In addition, there are four WestJet signs on the wall behind the counters and two WestJet advertisements on the inverted ceiling.

The 'info' signs represent informational signage. The first sign, represented by 'info-1', specifies the weight restrictions and additional charges for baggage.



Figure 4. 'Info-1' Sign. (J. Stopa, personal photograph, April 2, 2012).

There are two weight scales available for the customer to weigh their bag(s) prior to check-in. The second sign, represented by 'info-2', has a sizing device for carry-on bags for customers to test if their carry-on bag fits within the size restrictions.



Figure 5. 'Info-2' Sign. (J. Stopa, personal photograph, April 2, 2012).

4.2.2 Desired Customer Behavior 'Route B' (see [Appendix B-3](#) on p. 114)

In 'Route B' or the guest assistance route, the customer proceeds directly to the entrance and toward the first major touch point, the guest assistance line, where they wait to be checked-in and have their bags tagged and dropped off by a customer service agent at a counter. The second touch point is the guest assistance counter, where a customer service agent completes the transaction for the customer, after which the customer exits. A row of self-service kiosks bridges the entrance to 'Route B' yet no directional signage exists on this side to assist customers with the self-service process.

4.2.3 Actual Customer Behavior 'Route A' (see [Appendix B-2](#) on p. 113)

Generally, customers entering the check-in space bypassed the self-service kiosks en route to the entrance, where they read the enter sign or spoke with a guest ambassador to make a decision about entering 'Route A' or 'Route B'. Customers that proceeded to 'Route A', usually used the self-service kiosks located directly on either side of the entrance. A large percentage of customers using the self-service kiosks received assistance from a guest ambassador to print their boarding passes and bag tags, and self-tag their bags despite the instructional video. As a result, customers in 'Route A' had more contact time with a WestJet employee, on average, than customers did in 'Route B'. Typically, wait time in the bag drop line did not exceed 1 minute and 20 seconds, while contact time at the bag drop counter did not exceed 46 seconds (see [Appendix C](#) on p. 116). The analysis I conducted of customer behavior patterns during my observations revealed that 123 customers entered the check-in space between 1-2PM on April 2, 2012. 29.27% of these customers successfully completed 'Route A' without the assistance of a guest ambassador versus 28.46% of customers who required assistance from a guest ambassador. The remaining customers opted for 'Route B' or the guest assistance route (see [Appendix C-1](#) on p. 120).

4.2.4 Actual Customer Behavior 'Route B' (see [Appendix B-4](#) on p. 115)

No variances occurred between desired and actual customer behaviors in 'Route B' or the guest assistance route of the check-in space. Customers were directed by a guest ambassador to enter the guest assistance line, where they then waited to be checked-in and have their bags tagged and dropped off by a customer service agent at a counter. Next, they proceeded to an available counter for a customer service agent to complete the service transaction. Most customers did not require additional assistance from the guest ambassador beyond their initial contact at the entrance. Typically, wait time in the guest assistance line did not exceed 6 minutes and 43 seconds, while contact time at the guest assistance counter did not exceed 3 minutes and 7 seconds (see [Appendix C](#) on p. 116). The analysis I conducted for customer behavior patterns during my observations revealed that 123 customers entered the check-in space between 1-2PM on April 2, 2012. 42.28% of these customers refrained from entering 'Route A' in favor of choosing the full-service option in 'Route B'. The remaining customers went through 'Route A' or the self-service route (see [Appendix C-1](#) on p. 120).

5. Data Analysis

5a.1 'Route A'

As part of its competitive cost leadership strategy, WestJet is transitioning to a self-service model in its check-in space(s) to reduce its operating costs and streamline the check-in service (Director of International Operations, personal communication, March 4, 2012). In theory, the benefit to the customer is reduced time in service in 'Route A', since customers check themselves in, which reduces their contact time at the bag drop counter and wait time in the bag drop line. This is in contrast to 'Route B', where the customer waits to be checked-in by a customer service agent at a counter. Thus, 'Route A' is designed to be more efficient for the customer than 'Route B'.

In reality, 'Route A' is less efficient because it has more touch points and subsequently, more decision points for the customer. 'Route A' has three major touch points or decision points for the customer. These include the self-service kiosks, the

bag drop line, and the bag drop counters. Conversely, 'Route B' has just two touch points or decision points for the customer including the guest assistance line and guest assistance counter. The sub-touch points in both routes are designed to supply customers with information to make a decision at each major touch point in the check-in service. Pertinent sub-touch points at the first major touch point in 'Route A' include directional signage, videos, and employees.

The sub-touch points in both routes are designed to supply customers with information to make a decision at each major touch point in the check-in service.

5a.1.1 First Touch Point: Self-Service Kiosks

The self-service kiosks are made up of two parts, there is a touch screen application which customers use to print their boarding pass and bag tag, and there is a video display featuring an instructional video that directs customers to collect the above items and then self-tag their bags.



Figure 6. Self-service Kiosk. (J. Stopa, personal photograph, April 2, 2012).

Sign '1a' is a directional sign that uses numbers and plain language to instruct customers to proceed immediately to the self-service kiosks and follow the instructional video. Refer to **Figure 1.** on p. 18.

Sub-Touch Point One: Signage. Sign '1a' is located between every other kiosk on the self-service side. Yet, customers entering the check-in space generally dismissed these signs and bypassed the self-service kiosks en route to the entrance, where they read the enter sign or spoke with a guest ambassador to make a decision about entering 'Route A' or 'Route B'. Moreover, there is no signage located within the row of self-service kiosks on the guest-assistance side of the check-in space. This means that customers must rely solely on a guest ambassador for assistance on this side. The customer needs to perceive verbal, written and/or visual information before the decision point, which for 'Route A' customers is prior to encountering the self-service kiosks. Accordingly, the appropriate location for sign '1a' is in front and at the end of each row of self-service kiosks, so that it is the first information unit the customer perceives upon entering the airport terminal. In doing so, the design of the check-in space would begin to reflect the decision-making behavior of the customer (Passini, 1984).

Particularly in 'Route A', customers refer to signage to understand how to navigate the layout. Equally, O'Neill (1991) argues that "signage is commonly employed to compensate for complex layouts...in which wayfinding is a chronic problem" (p. 554). However, customers encountering sign '1a' still required additional assistance from a guest ambassador. WestJet hires guest ambassadors to direct customers through the check-in space and specifically, to help customers self-tag their bags. In other words, guest ambassadors are employed as a corrective measure for signage that contains inadequate information and/or is positioned in inaccessible locations for the customer.

Guest ambassadors are employed as a corrective measure for signage that contains inadequate information and/or is positioned in inaccessible locations for the customer.

Sub-Touch Point Two: Video. The video displays located on the self-service kiosks features an instructional video to direct customers to print their boarding pass and bag tag, and self-tag their bags using the self-service kiosks. Yet, in observing customer behavior, it became apparent that customers using the self-service kiosks required assistance from a WestJet employee to complete these tasks despite the instructional video. This is problematic since the behavioral objectives of the instructional video are for the customer to print their own boarding pass and bag tag, and self-tag their bags. In effect, the instructional video is designed for customers to become 'doers' (Visocky O'Grady, 2008) by executing decisions into behaviors, yet customers do not consult the video display as a source of information for how to behave. Customers are "incapable of making [their own] decisions" (Visocky O'Grady, 2008, p. 75) from the instructional video and thereby defer their decision-making authority to a WestJet employee, which results in more contact time and less *self-service* time for the customer in 'Route A' of the check-in space.

The instructional video features WestJet employees who model the desired behaviors for customers. Just as McLuhan (1964) states, "the 'content' of any medium is always another medium" (p. 23), the instructional video is a mediated copy of the WestJet employees in real life (Kickasola, 2006). Subsequently, the content draws attention to its referent or the real thing instead of to itself, even though the purpose of the video display is to make the instructional video directly accessible to the customer. The customer is left to confront the medium or video display instead of being in immediate contact with the content or instructional video (Bolter & Grusin, 1999). In effect, the video display is the mediating agent between the customer and the instructional video (Bolter & Grusin, 1999). Hence, this medium lacks immediacy for customers, which affects their ability to process information in the instructional video to make decisions on how to behave. As the video display becomes more immediate, the behavioral objectives of the instructional video become more transparent to the customer.

As the video display becomes more immediate, the behavioral objectives of the instructional video become more transparent to the customer.

Moreover, while the user application on the self-service kiosks is interactive, the video displays are not. McMillan (2006) defines interactivity as a property of a medium that affords users with choice, control, participation, and which enables multi-directional communication or feedback. The self-service kiosks act as a vehicle of two-way communication for the customer (McMillan, 2006); the customer inputs information to the application to obtain their boarding pass and bag tag and the application responds by printing these items. Hence, feedback from the application is instantaneous to the customer. Yet customers do not always know how to use the application to check-in because the video display does not effectively communicate these instructions. The video displays on the self-service kiosks provide a form of one-way communication to customers by supplying them with information on how to behave at this touch point (Fewings, 2001). Customers are not given any feedback on their behaviors from the instructional video and thus, they have no measure of whether they are behaving appropriately at this touch point.

While “reciprocal, two-way communication is a common desire” (McMillan, 2006, p. 212) for both customers and the design of the self-service kiosks, the video display positions the customer as a passive recipient of information. The design of the video displays needs to be interactive to involve the customer in the decision-making process. As it exists, customers forego the instructional video in favor of obtaining information from WestJet employees because the latter option has the added advantage of interactivity and feedback.

The need for immediacy and interactivity can be further understood in terms of the technological affordances of the video display. As part of the self-service kiosks, the video displays are designed to replace the role of the WestJet employee. To achieve this, the video display needs to be perceived by customers as a viable alternative to the real thing (Bolter & Grusin, 1999). There are currently twelve video displays available for customers to refer to in printing their boarding pass, bag tag, and self-tagging their bags. This is compared to a maximum of three or four guest ambassadors available to assist customers with these tasks at any given time. The video displays are thereby designed to afford customers with greater reach

and support than WestJet employees (Baym, 2010). The video displays are also designed to afford WestJet with greater control over its service process since “the presence of people [or WestJet employees]...brings a higher risk that service quality will vary” (Shostack, 1984, p. 136). However, because the video displays do not afford customers with the same benefits as face-to-face communication, they cannot replace the role of the WestJet employee entirely.

Customers view the video display as a “diminished form of face-to-face [communication]” (Baym, 2010, p. 51) with a WestJet employee, because it is a lean medium that emits relatively few social cues. The design of the video display thereby acts as a barrier to customers’ ability to process information. Designing immediacy cues and interactivity cues into the video display would help to collapse the barrier between customers and this medium by reproducing and/or reforming the real thing (i.e. WestJet employees) (Bolter & Grusin, 1999).

As the content becomes more immediate and interactive for the user it transforms into an extension of the user’s experience in real life (Bolter & Grusin, 1999). Specifically, by designing immediacy and interactivity into the video displays, the video display would be removed as the mediating agent between the customer and the instructional video (Bolter & Grusin, 1999). As a result, customers would no longer have to defer their decision-making authority to WestJet employees in real life because they could “stand in the same relationship to the content as [they] would if [they] were confronting the original medium” (Bolter & Grusin, 1999, p. 340) or real thing. In turn, this would restore customers’ autonomy over their decision-making, which is important in the self-service route of the check-in space wherein the objective is to reduce contact time, wait time, and cycle time for customers by making them more self-sufficient.

Additionally, the design of the instructional video requires the customer to make too many decisions in a short period of time. This leads to ‘map shock’ whereby the customer is unable to create a cognitive map to decide how to behave at this touch point (Visocky O’Grady, 2008). In consequence, “[i]nformation processing stops as the [customer] tries to orient themselves to the overwhelming

quantity of data” (Visocky O’Grady, 2008). As the volume of data exceeds customers’ information processing capacity, information overload ensues (McShane & Steen, 2009). It is therefore crucial to minimize the number of decisions the customer has to make at this touch point as the fewer decisions customers make, the more efficient or architecturally legible the design of this touch point becomes (Arthur & Passini, 1992). Furthermore, by reducing the volume of data in the instructional video, customers’ information processing capacity is increased.

I recommend breaking the self-tagging steps into more manageable chunks to make it easier for customers to “access, understand, and recall” (Visocky O’Grady, 2008, p. 61) information. To achieve this, I suggest that customers be given control over the flow of information by inserting a pause and play feature in the instructional video. This feature would factor in how customers perceive and process information by enabling them to complete tasks on their own time (Lipton, 2007). It would also increase the immediacy of the video display by inviting customers to interact directly with the instructional video and return to information if needed. These recommendations highlight how immediacy and interactivity are interrelated concepts; interactivity increases the immediacy of a medium by positioning its content under user control.

Sub-Touch Point Three: Employees. To facilitate the transition to self-service for customers in ‘Route A’ of the check-in space, WestJet is restructuring its labor force from customer service agents to guest ambassadors (Director of International Operations, personal communication, March 4, 2012). The role of guest ambassadors is to train customers how to use self-service so that customers become self-sufficient the next time they check-in. Subsequently, the organization is slowly eliminating all of the tasks WestJet employees can complete for the customer at each touch point (Director of Planning and Support, personal communication, April 20, 2012). The move to self-service also minimizes the ratio of employees needed to customers in the check-in space. According to the Director of Planning and Support (April 20, 2012), WestJet employees welcome the role

reclassification because it allows them to perform more of a support function to better manage customers' anxiety levels in the check-in space.

In theory, the check-in space caters to the needs of WestJet employees and customers simultaneously but in practice, design decisions for this space are made with a limited consideration of the impact on customers' wayfinding behavior (Bitner, 1992). WestJet conducts a post-analysis of the impact of the design of the check-in space on customer behavior via annual customer surveys and inter-departmental feedback (Director of Planning and Support, personal communication, April 20, 2012). Moreover, while the Operations Research team predicts customer behaviors by running computer simulations, "there is no way to assess [customers'] actual wayfinding performance" (O'Neill, 1991, p. 556) in the check-in space. This is in spite of the fact that customers' experience of service quality is influenced by the extent to which they can easily navigate the check-in space (Fewings, 2001). Since customers are performing most of the actions in the self-service route of the check-in space, WestJet needs to design for customers' behavior in the actual setting or "their ability to perceive, select and understand information...their ability to understand the spatial characteristics of settings and their movements through them and...to design for their ability to develop decisions in order to reach destinations" (Passini, 1996, p. 321). In doing so, the design of the check-in space can be controlled by WestJet to "enhance (or constrain)...customer actions" (Bitner, 1992, p. 65) and encourage desired customer behaviors.

As it exists, customers are less self-sufficient in 'Route A' of the check-in space because they readily defer their decision-making authority to WestJet employees. This was especially apparent during my observations of customers at the self-service kiosks or the first touch point in 'Route A' of the check-in space. Guest ambassadors approached customers before the latter had time to make and execute decisions on their own. As a result, these employees routinely completed the service transaction for customers at this touch point. This is counter to WestJet's objectives for self-service, which is to reduce contact time for customers by putting the customer in control of the check-in service. WestJet makes the assumption that

repeat customers understand how to use self-service, yet if customers are not given the opportunity to learn independently, they will continue to yield to guest ambassadors.

The time analysis I conducted for customer behavior patterns during my observations revealed that 28.46% of customers in a one-hour time period required assistance with self-service from a guest ambassador. This is compared to 29.27% of customers who successfully completed all major touch points in 'Route A' without the assistance of a guest ambassador (see [Appendix C-1](#) on p. 120). While self-sufficient and repeat customers form the majority, these results suggest that customers' initial experience with guest ambassadors may shift their expectations of service delivery in the self-service route of the check-in space such that they expect to be served in the future. In turn, this hampers newer customers from learning and creates a gap between WestJet's expectations for and experiences with self-service.

Customers' initial experience with guest ambassadors may shift their expectations of service delivery in the self-service route of the check-in space such that they expect to be served in the future.

I recommend installing a help button on the self-service kiosks for customers to default to when required. The help button would alert an available guest ambassador to assist the customer in need. This would give customers the time to familiarize themselves with the self-service kiosks before consulting a guest ambassador. Equally, WestJet is gradually moving some of its customer training components online, which will place greater responsibility and control on the customer to learn how to use self-service independently (Director of Planning and Support, personal communication, April 20, 2012).

5a.1.2 Second Touch Point: Bag Drop Line

Research by O'Neill (1991) suggests that layout has a greater influence on people's wayfinding performance in a space than other directional aids like signage. In 'Route A' of the check-in space, stanchions provide a definable layout of the bag drop line and queuing formation for customers. The layout of stanchions acts as a sub-touch point that aids the customer in route learning (Evans et al., 1981).

Sub-Touch Point: Layout. Bitner (1992) defines layout as “the ways in which machinery, equipment, and furnishings are arranged...and the spatial relationships among them” (p. 66). Spatial layout is particularly important in the self-service route of the check-in space, where customers are expected to perform on their own. The layout of stanchions in the bag drop line is identical to that of the guest assistance line in ‘Route B’ of the check-in space. Additionally, both the bag drop line and the guest assistance line are located behind a row of self-service kiosks. In other words, there is no architectural differentiation for the customer between the bag drop line and the guest assistance line (Fewings, 2001). To address this issue, a guest ambassador stands at the mouth of the entrance to direct customers to ‘Route A’ or ‘Route B’ of the check-in space and signage is used to define each route for customers. These directional aids “compensate for [customers’] wayfinding problems due to the complexity of the floor plan” (O’Neill, 1991, p. 571).

Spatial layout is an important source of information for customer wayfinding; customers have to recognize the layout before they can execute decisions into behaviors (Arthur & Passini, 1996). Activities within ‘Route A’ need to be grouped together according to spatial characteristics so that customers can differentiate between routes (Arthur & Passini, 1992). Arthur & Passini (1992) argue that circulation is “the key organizing force of a layout” (p. 89), yet in the check-in space, circulation stops at the entrance as customers look for spatial information on how to behave. On multiple occasions, I observed customers forming a bottleneck by lining up at the entrance to get direction from a guest ambassador.

Spatial layout is an important source of information for customer wayfinding; customers have to recognize the layout before they can execute decisions into behaviors.

I recommend creating separate entrances for ‘Route A’ and ‘Route B’, instead of having one main entrance, to improve customer circulation in this area and to better define each route for the customer. Since wait time in the bag drop line is never meant to exceed 3 minutes (Director of Planning and Support, personal communication, April 20, 2012), and in the case of my observations, it never did,

the queue formation could be designed more directly as a linear path leading customers from the kiosks to the counters (refer to **Appendix C** on p. 116 for time analysis data).

5a.1.3 Third Touch Point: Bag Drop Counters

WestJet employees act as a sub-touch point by facilitating the service transaction for customers at the bag drop counters.

Sub-Touch Point: Employees. The bag drop counter is designed to be a 15-45 second transaction for the customer (Director of Planning and Support, personal communication, April 20, 2012). While contact time typically does not exceed this window, results from my time analysis indicates that it is subject to variation on occasion (see **Appendix C** on p. 116). As the Director of Planning and Support (April 20, 2012) explained, in addition to scanning bag tags and weighing baggage, customer service agents collect baggage fees (when required) and attend to additional customer needs. These non-standard tasks prolong the contact time for customers at the bag drop counters which results in a longer wait time in the bag drop line, and longer cycle time in 'Route A' of the check-in space.

To address variances in contact time at the bag drop counter, WestJet envisions the customer service agent or guest ambassador monitoring customers throughout the service process to minimize the number of concerns customers bring with them to the bag drop counter. Additionally, the design of the new user-application on the self-service kiosks will provide WestJet with more opportunities to collect fees from customers (Director of Planning and Support, personal communication, April 20, 2012). These initiatives will relieve customer service agents from completing the above tasks at the bag drop counter.

5a.1.4 Summary of 'Route A'

'Route A' is not entirely architecturally legible to the customer because in most cases, the design of sub-touch points in this route does not aid the customer in creating an accurate cognitive map of the check-in service. Consequently, actual customer behaviors vary from desired customer behaviors in 'Route A' of the check-in space. Research by Passini (1996) indicates that "people...tend to develop

similar [behavior] patterns in settings in which adequate information is provided” (p. 323); however, inadequate information creates ambiguity, which results in more variances in people’s behaviors. This suggests that variances between customers’ actual and desired behaviors exist not from the customers’ own cognitive deficiencies but from the service design of the check-in space (Passini, 1996).

Variances between customers’ actual and desired behaviors exist not from the customers’ own cognitive deficiencies but from the service design of the check-in space.

5b.1 ‘Route B’

‘Route B’ is a person-to-person service encounter between WestJet’s frontline staff, which includes customer service agents and guest ambassadors, and customers. Correspondingly, the main sub-touch point in ‘Route B’ is WestJet employees. Full-service entails more opportunities for WestJet employees to interact with customers and tailor the service to fit customers’ individual needs (Glushko, 2010). Since WestJet employees are the main point of contact in ‘Route B’ of the check-in space, they also become the markers of service quality for customers versus information artifacts like signage (Glushko, 2010). Moreover, unlike in ‘Route A’ where customers process available information to make decisions, WestJet employees are charged with the responsibility of obtaining and providing information for customers in ‘Route B’ of the check-in space. This results in less-decision making for customers because WestJet employees instruct customers on how to behave. More importantly, it closes the gap between customers’ actual and desired behaviors.

5b.1.1 First Touch Point: Guest Assistance Line

Sub Touch Point: Employees. Customers opting for the full-service option proceed directly to the entrance where a guest ambassador directs them to ‘Route B’. The guest ambassador makes a decision for customers about which route to enter based on an assessment of their needs. According to the Director of Planning and Support (April 20, 2012), wait time in the guest assistance line should not exceed 10 minutes, this is compared to a maximum wait time of 3 minutes in the bag drop line. Thus, customers entering this touch point in ‘Route B’ make a

trade-off between wait time in the guest assistance line and decision-making in 'Route A'. The analysis I conducted for customer behavior patterns during my observations revealed that, within a one-hour time period, 42.28% of customers chose the full-service option in 'Route B' in favor of the self-service option in 'Route A'. These results suggest that the majority of customers are not willing to make this trade-off (see **Appendix C-1** on p. 120).

Equally, WestJet drives customers to use self-service to minimize the amount of customers in the guest assistance line (Director of Planning and Support, personal communication, April 20, 2012). However, the more customers opt for self-service, the less wait time there is for customers in the guest assistance line. As the speed of service increases in the guest assistance line, so too does the customer's experience, which suggests that WestJet's transition to self-service is improving the quality of service delivery for customers in 'Route B'.

WestJet's transition to self-service is improving the quality of service delivery for customers in 'Route B' or the guest assistance route.

5b.1.2 Second Touch Point: Guest Assistance Counter

Sub-Touch Point: Employees. Some customers are limited to the full-service option because they have specialized needs that cannot be accommodated in self-service (Director of Planning and Support, personal communication, April 20, 2012). The range of customer needs at the guest assistance counter results in fluctuations in contact time and contributes to variable wait times in the guest assistance line. Results from the time analysis I conducted of customer contact time at the guest assistance counter revealed an approximate variation of +/- 2 minutes, this is compared to an approximate variation in contact time of +/- 7 seconds at the bag drop counter (see **Appendix C** on p. 116). Thus, while the guest assistance route can be time-efficient, customers assume greater risk in choosing this option. Yet, this risk decreases as customer arrival time before departure increases (Senior Analyst of Operations Research, personal communication, April 20, 2012). Effectively, when customers allot themselves more

time to check-in, the trade-off between wait time in the guest assistance line and decision-making in 'Route A' is reduced.

5b.1.3 Summary of 'Route B'

'Route B' can be considered a "design success [because]...it allows easy and error-free navigation" (Werner & Schindler, 2004, p. 462) for customers. That is to say 'Route B' is architecturally legible to customers, since WestJet employees or sub-touch points make explicit the behavioral objectives at each major touch point for customers. Yet, despite its success, the full-service route is a departure from the strategic objectives of WestJet as an organization.

6. Discussion

In the early stages of its development, the design of 'Route A' or the self-service route lacks some utility and/or is not entirely architecturally legible for customers. As evidenced via observation, customers are not behaving as desired in the self-service route. This suggests that WestJet does not fully understand or consider customers' needs in terms of the functionality of its design (Clatworthy, 2011). To understand customer behavior and add value to the self-service route, WestJet must "vie[w] the service through the customer's eyes" (Clatworthy, 2011, p. 80), that is, the organization has to access customers' cognitive maps of this route. As my research has shown, customers' cognitive maps are obtainable by observing customers' actual behaviors, since these behaviors are a direct reflection of customers' decision-making or "interpretation of [service] task(s) in light of environmental information" (Passini, 1981, p. 22).

Furthermore, WestJet needs to provide a consistent service experience for the customer in the check-in space (Clatworthy, 2012). However, 'Route A' is undergoing an identity crisis in that it cannot decide whether it is self-service or a series of technology enhanced person-to-person service encounters (Glushko, 2010). The issue is whether "technology should be used to replace the frontline employee entirely, leaving a self-service encounter" (Glushko, 2010, p. 224) or whether technology can support customer interactions. The larger issue is specifying the role of WestJet employees in the check-in space. Currently, the same WestJet employees

perform different roles for customers depending on which route customers choose. Customer service agents, for example, become guest ambassadors for customers in the self-service route, yet, as guest ambassadors they also direct full-service customers into the guest assistance line. This results in an inconsistent and potentially confusing service experience for the customer.

‘Route A’ or the self-service route is undergoing an identity crisis in that it cannot decide whether it is self-service or a series of technology enhanced person-to-person service encounters.

It is unnecessary for WestJet employees and technology to perform the same roles in ‘Route A’; as Patrício et al. (2008) state, “[t]echnology [should] specializ[e] in what it does best; people [should] specialize in what they do best” (p. 330). The integration of technology into the check-in service creates new opportunities to serve customers’ needs but dramatically changes the service experience by adding new points of contact to a service. Rather than just automating touch points to lower costs, it is important that WestJet’s value proposition is communicated and translated across each touch point of the check-in service (Clatworthy, 2012) to deliver customers with a consistent service experience (Zomerdijk & Meyer, 2010). The process of designing for customer experiences across multiple points of contact is otherwise known as multichannel customer experience management (Patrício et al., 2008). From this perspective, customer experience results from “a combination of *what* is offered [service touch points] and *how* it is offered [automated or in-person]” (Patrício et al., 2008, p. 320; original emphasis) during a service. In designing its service touch points, WestJet should consider managing the trade-offs between cost reduction, efficiency, and face-to-face interaction without degrading the customers’ service experience (Patrício et al., 2008). That is, WestJet should place greater emphasis on managing the customers’ experience by evaluating the capacity of different touch point designs to enhance service delivery (Patrício et al., 2008).

In automating certain touch points, it is important to factor in customers' technology adoption rates (Rogers, 1995) or the rates at which customers are eager and willing to try new technology. According to Rogers (1995), "[o]ne of the most distinctive problems in the diffusion of [technology] is that [people] are usually quite heterophilous" (p. 19) in their adoption behaviors, implicating that customers will differ in their willingness to try new technology. As the Senior Manager of Operations Research (April 20, 2012) explained, customers' technology adoption rates in the check-in space are dependent on the spread of technology in the larger population. The more widespread a technology becomes in the larger population, the greater the likelihood that the majority of customers will have experience using that technology. Hence, WestJet needs to ensure that the technology it integrates into the check-in service is compatible with existing technological trends in the larger population, since customers' prior experience with a technology will increase their likelihood of adopting it (Rogers, 1995). In other words, customers' technology adoption rates in the check-in space are dependent on the ability of the technology to adapt to changes in customers' use behaviors over time (Rogers, 1995).

Customers' prior experience with a technology will increase their likelihood of adopting it.

WestJet needs to design for customer experiences, which are formed at each touch point in the check-in space (Meyer & Schwager, 2007). This involves defining desired customer experience outcomes during the design stage of the service (Clatworthy, 2012). WestJet's computer models are useful for mapping out a potential service process in terms of performance metrics but should incorporate a stronger focus on customer experience requirements (CERs) (Patrício et al., 2008). A model is thereby needed to design for customers' experiences and to acknowledge customers as co-creators of value in the check-in space (Patrício et al., 2008). Equally, customers have to "know in concrete terms what the service involves and understand their respective roles in its delivery or co-creation" (Bitner et al., 2008, p. 70). The more customers are involved in the service, the more likely the "service is of evoking co-ownership which in turn will result in increased customer loyalty and long-term engagement" (Stickdorn, 2011, p. 39).

WestJet has already taken steps to unify the customers' service experience in 'Route A'. Notably, WestJet is adding more online touch points in the pre-service period to instruct customers how to behave during actual service (Director of Planning and Support, personal communication, April 20, 2012). This initiative negates the need for guest ambassadors to train customers how to use self-service in-person, in addition to prolonging customers' experience with the WestJet brand. Moreover, the organization is slowly eliminating all of the tasks WestJet employees can complete for the customer at each touch point in 'Route A' (Director of Planning and Support, personal communication, April 20, 2012). Guest ambassadors are becoming a last resort, next to full-service, for customers unable to figure out self-service. Increasing the role of customers through interactivity in 'Route A' frees up tasks that would otherwise be completed by WestJet employees. It also reduces the number of employees needed in this route, which lowers the cost of labor for WestJet.

7. Research Limitations

My MRP focuses on the frontstage operations of the check-in space during actual service or "when the customers actually experience [the] service" (Stickdorn, 2011). As such, my research does not take into account the entire lifecycle of the check-in service including the pre-service period or the point at which customers are introduced to the service, and the post-service period (Stickdorn, 2011). The individual touch points and the built environment containing the service represent only one area of analysis in the design of services. A comprehensive analysis would factor in this "wider context in which the service process takes place" (Stickdorn, 2011). In terms of my methodology, the service blueprint is one method for designing services. Other methods for designing a service include service ethnographies, stakeholder maps, customer journey maps, and service staging (Van Dijk et al., 2011). The more methods organizations use to design their services, the greater control they have over the service process.

Moreover, since I did not interact directly with customers, I had no firsthand knowledge of their expectations for and experiences of the check-in service. Instead, I was limited to observing how customers experienced the design of the check-in service through their visible behaviors. My evaluation of customer experience was based on whether the design of the check-in space enabled or constrained customers in reaching their desired outcome, which is to check-in for their flight on time (Bitner, 1992). Yet, in assuming that customer behaviors are malleable, I did not establish a cause and effect relationship between customer behavior and service design leaving open the possibility to explore customer agency. The design of the check-in space “does not directly *cause* [customers] to behave in certain ways” (Bitner, 1992, p. 62; original emphasis) rather it affects their ability to make and execute decisions. Repeat customers, for example, are familiar with the check-in service and have greater decision-making power because they know how to act and can choose from alternative courses of action, such as whether to enter ‘Route A’ or ‘Route B’ (Director of Planning and Support, personal communication, April 20, 2012). Thus, while the design of the service defines the possibilities and limitations of decision-making, customers exert agency over their behavioral actions (Bitner, 1992).

While the design of the service defines the possibilities and limitations of decision-making, customers exert agency over their behavioral actions.

Finally, while my research focused on customers’ behavior in the check-in space, the results of my analysis implicate that the design of the check-in space affects both customers and employees at WestJet. Customers and employees perform a series of behaviors within the check-in space (Bitner, 1992). To regulate these behaviors, WestJet needs to specify desirable employee behaviors as well as those of customers. The inclusion of employees exemplifies the fact that the needs and requirements of various stakeholders must be incorporated into the design of the check-in space (Bitner, 1992).

8. Conclusion

In exploring how the service design of the domestic check-in space at WestJet affects customer behavior, I analyzed customers' wayfinding behavior in this space. Each touch point in the check-in space communicates with and aids customers in their decision-making (Passini, 1996). In turn, these touch points or "design features have an impact on [customers'] wayfinding performance" (Fewings, 2001, p. 180) within the check-in space, and can prevent poor user experiences by instructing customers how to behave (Visocky O'Grady, 2008). Each point of contact designed between customers and WestJet is part of the organization's service strategy. It is therefore important that WestJet designs every touch point in the check-in space to manage customers' experience of service quality by planning for their behaviors during actual service. In doing so, WestJet can practice service design thinking in seeking to "understand, regulate and support" (Bisset, 2011, p. 300) customers' wayfinding behavior by designing the check-in service to assist customers in creating a cognitive map that matches the service blueprint (O'Neill, 1991).

References

- Arthur, P., & Passini, R. (1992). *Wayfinding: People, signs, and architecture*. New York, NY: McGraw-Hill.
- Baym, N. K. (2010). *Personal connections in the digital age*. Cambridge: Polity Press.
- Bisset, F. (2011). Integrating service design thinking and motivational psychology. In M. Stickdorn & J. Schneider, *This is service design thinking* (pp. 300-307). Hoboken, NJ: John Wiley & Sons, Inc.
- Bitner, M. J., Ostrom, A. L., & Morgan, F. N. (2008). Service blueprinting: A practical technique for service innovation. *California Management Review*, 50(3), 66-94.
- Bitner, M. J. (1992). Servicescapes: the impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57-71.
- Bolter, J.D., & Grusin, R. (1999). Introduction: the double logic of remediation. *Remediation: Understanding New Media*. MIT Press.
- Clatworthy, S. (2012). Bridging the gap between brand strategy and customer experience. *Managing Service Quality*, 22(2), 108-127.
- Clatworthy, S. (2011). Interaction design: Services as a series of interactions. In M. Stickdorn & J. Schneider, *This is service design thinking* (pp. 80-87). Hoboken, NJ: John Wiley & Sons, Inc.
- Evans, G.W., Marrero, D.G., & Butler, P.A. (1981). Environmental learning and cognitive mapping. *Environment and Behavior*, 13(1), 83-104.

- Fewings, R. (2001). Wayfinding and airport terminal design. *Journal of Navigation*, 54(2), 177-184.
- Glushko, R.J. (2010). Seven contexts for service system design. In P.P. Maglio et al. (Eds.), *Handbook of service science*, (pp. 219-249). Boston, MA: Springer.
- Karjalainen, T.M. (2004). *Semantic Transformation in Design*. University of Art and Design: Helsinki.
- Kickasola, J. (2006). Contemporary media and the evolving notion of media immediacy. *Quarterly Review of Film and Video*, 23, 299-310. doi: 10.1080/10509200690897581
- Lipton, R. (2007). *The practical guide to information design*. NJ: John Wiley & Sons, Inc.
- McLuhan, M. (1964). Chapter 1.1 of *Understanding Media: The Extensions of Man*. New York, NY: Penguin Group.
- McMillan, S. (2006). Exploring models of interactivity from multiple research traditions: Users, documents and systems. In L. A. Lievrouw & S. Livingstone, *The Handbook of New Media* (Student ed., pp. 205-229). London: Sage Publications.
- McShane, S.L., & Steen, S.L. (2009). *Canadian organizational behavior* (7th ed.). Toronto: McGraw-Hill Ryerson.
- Meyer, C., & Schwager, A. (2007). Understanding customer experience. *Harvard Business Review*, 116-126.

- O'Neill, M. J. (1991). Effects of signage and floor plan configuration on wayfinding accuracy. *Environment and Behavior*, 23(5), 553-574. Doi: 10.1177/0013916591235002.
- Opdenakker, R. (2006). Advantages and disadvantages of four interview techniques in qualitative research. *Forum: Qualitative Social Research*, 7(4), 1-13.
- Passini, R. (1996). Wayfinding design: Logic, application and some thoughts on universality. *Design Studies*, 17(3), 319-331.
- Passini, R. (1984). Representations, a wayfinding perspective. *Journal of Environmental Psychology*, 4, 153-164.
- Passini, R. (1981). Wayfinding: A conceptual framework. *Urban Ecology*, 5, 17-31.
- Patrício, L., Fisk, R.P., & and Falcão e Cunha, J. (2008). Designing multi-interface service experiences: The service experience blueprint. *Journal of Service Research*, 10(4), 318-334. doi: 10.1177/1094670508314264.
- Randall, L. (1993). Perceptual blueprinting. *Managing Service Quality*, 7-12.
- Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). New York: Free Press.
- Shostack, L.G. (1987). Service positioning through structural change. *The Journal of Marketing*, 51(1), 34-43.

- Shostack, L.G. (1984). Designing services that deliver. *Harvard Business Review*, 62(1), 133-139.
- Shostack, L.G. (1982). How to design a service. *European Journal of Marketing*, 16(1), 49-63.
- Stewart, C., & Cash, W. (2008). *Interviewing principles and practices*. (12th ed.). New York: McGraw-Hill.
- Stickdorn, M. (2011). 5 principles of service design thinking. In M. Stickdorn & J. Schneider, *This is service design thinking* (pp. 34-45). Hoboken, NJ: John Wiley & Sons, Inc.
- Van Dijk, G., Raijmakers, B., & Kelly, L. (2011). This is a toolbox - Not a Manual. In M. Stickdorn & J. Schneider, *This is service design thinking* (pp. 148-215). Hoboken, NJ: John Wiley & Sons, Inc.
- Visocky O'Grady, J., & Visocky O'Grady, K. (2008). *The information design handbook*. Cincinnati, Ohio: How Design.
- Weisman, J. (1981). Evaluating architectural legibility: Way-finding in the built environment. *Environment and Behavior*, 13(2), 189-204. doi:10.1177/0013916581132004.
- Werner, S., & Schindler, L.E. (2004). The role of spatial reference frames in architecture: Misalignment impairs way-finding performance. *Environment and Behavior*, 36(4), 461-482. doi: 10.1177/0013916503254829.
- Zomerdijk, L.G., & Voss, C.A. (2010). Service design for experience-centric services. *Journal of Service Research*, 13(1), 67-82.

Appendix A REB Letter of Approval

RYERSON UNIVERSITY
RESEARCH ETHICS BOARD

To: Jaime Stopa
MPC

Re: REB 2012-025: MRP: Examining how the design of a space communicates to its users by structuring human activity and interactions. I am looking at a specific space: Westjet's check-in area at the Toronto International Pearson Airport.

Date: February 15, 2012

Dear Jaime Stopa,

The review of your protocol REB File REB 2012-025 is now complete. The project has been approved for a one year period. Please note that before proceeding with your project, compliance with other required University approvals/certifications, institutional requirements, or governmental authorizations may be required.

This approval may be extended after one year upon request. Please be advised that if the project is not renewed, approval will expire and no more research involving humans may take place. If this is a funded project, access to research funds may also be affected.

Please note that REB approval policies require that you adhere strictly to the protocol as last reviewed by the REB and that any modifications must be approved by the Board before they can be implemented. Adverse or unexpected events must be reported to the REB as soon as possible with an indication from the Principal Investigator as to how, in the view of the Principal Investigator, these events affect the continuation of the protocol.

Finally, if research subjects are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and approvals of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research.

Please quote your REB file number (REB 2012-025) on future correspondence.

Congratulations and best of luck in conducting your research.



Nancy Walton, Ph.D.
Chair, Research Ethics Board

Appendix A-1 Data Collection Schedule and MRP Timeline

Data collection

Interview	Status
Director of International Operations	Completed March 4, 2012
Senior Analyst of Operations Research	Completed April 20, 2012
Senior Manager of Operations Research	Completed April 20, 2012
Director of Planning and Support	Completed April 20, 2012

Observation	Status
Pilot observation	Completed February 29, 2012
Observation #2	Completed March 26, 2012
Observation #3	Completed April 2, 2012

Appendix A-1 Data Collection Schedule and MRP Timeline

MRP timeline

Date	Activity
January 16, 2012	Confirmed second reader
February 15, 2012	REB Approval granted
April 15, 2012	Submit final proposal to supervisor
April 27, 2012	Submit final proposal to second reader
April 30, 2012	Submit MRP outline to supervisor
April-May, 2012	MRP writing, bi-monthly progress meeting with supervisor
May 14, 2012	Submit complete draft of MRP to supervisor
May 30, 2012	Submit final draft of MRP to supervisor
June 1, 2012	Submit final draft of MRP to second reader
July/August, 2012	Complete research poster and final edits on MRP
August 29, 2012	Oral presentations and research poster exhibition

Appendix A-2 Ryerson University Consent Agreement Form

Proposed Topic: Examining how the service design of the check-in space at WestJet affects customer behavior. In the context of this study, service design refers to all of the touch points or points of contact between the customer and the organization designed into the check-in space, such as signage, videos, equipment, furniture, branding, and employees.

You are being asked to participate in a research study. Before you give your consent to be a volunteer, it is important that you read the following information and ask as many questions as necessary to be sure you understand what you will be asked to do.

Principle Investigator: Jaime Stopa is a graduate student in the Master of Professional Communication (MPC) program in the faculty of communication and design (FCAD) at Ryerson University. Her research supervisor is Dr. Janice Fung, a professor in the FCAD.

Purpose of the Study: This study will determine how the design of the check-in space communicates with its customers to meet the service objectives of the organization. Participants recruited for this study are involved in the design of the check-in space and/or work within this space.

Description of the Study: You will be asked a series of questions regarding the design of the check-in space at WestJet such as: what are the service delivery objectives of this check-in space at WestJet? How is the design of this space meeting the said service delivery objectives? Interviews will be conducted during regular business hours at WestJet. Participants will be expected to dedicate thirty (30) minutes to the interview.

What is Experimental in this Study: None of the procedures used in this study are experimental in nature. The only experimental aspect of this study is the gathering of information for the purpose of analysis.

Risks or Discomforts: Because of the scope of this project, a follow-up interview may be required. In the event of a follow-up interview, participants will be asked to dedicate an additional thirty (30) minutes to answer questions during regular business hours. The participant may discontinue participation, either temporarily or permanently at any time. There will be no employment or economic repercussions from participating in this study.

Benefits of the Study: There are no benefits that individual participants can reasonably expect by participating in this study. WestJet will be provided with a copy of the final project and will have access to any research findings in the study.

Confidentiality: Interviews will be recorded and transcribed, and stored in a secure area for the duration of the study, which is six months (6). Participants have the option to review and edit the information they provide prior to any publication. Unless otherwise agreed to, participants' name(s) will not be used and confidentiality of all participants will be maintained.

Incentives to Participate: Participants will not be paid to participate in this study.

Costs and/or Compensation for Participation: There are no known costs associated with participation in this study.

Voluntary Nature of Participation: Participation in this study is voluntary. Your choice of whether or not to participate will not influence your future relations with Ryerson University. If you decide to participate, you are free to withdraw your consent and to stop your participation at any time without penalty or loss of benefits.

to which you are allowed. At any particular point in the study, you may refuse to answer any particular question or stop participation altogether.

Questions about the Study: If you have any questions about the research now, please ask. If you have questions later about the research, you may contact:

Dr. Janice Fung

Phone: 416.979.5000 ext. 6384

Email: janice.fung@ryerson.ca

If you have questions regarding your rights as a human subject and participant in this study, you may contact the Ryerson University Research Ethics Board for information.

Research Ethics Board
c/o Office of the Vice President,
Research and Innovation
Ryerson University
350 Victoria Street
Toronto, ON M5B 2K3
416-979-5042

Agreement:

Your signature below indicates that you have read the information in this agreement and have had a chance to ask any questions you have about the study. Your signature also indicates that you agree to be in the study and have been told that you can change your mind and withdraw your consent to participate at any time. You have been given a copy of this agreement.

You have been told that by signing this consent agreement you are not giving up any of your legal rights.

Name of Participant (please print)

Signature of Participant

Date

Signature of Investigator

Date

Appendix A-3 Interview Guide

1. Service design and strategy

a. Service objectives

- What are WestJet's service objectives for the check-in space?
- How do the service objectives of the check-in space reflect the service objectives of WestJet as an organization?

b. Needs of customers

- Identify the needs of the WestJet customer in the check-in space.
- How does the current design of the check-in space reflect the needs of the customer?

c. Needs of employees

- Identify the needs of the WestJet employees that work in the check-in space
- How does the current design of the check-in space reflect the needs of the WestJet employee?

d. Needs addressed through design

- To what extent does the current design of the check-in space meet the service delivery objectives of:
 - The space
 - The organization

2. Service design challenges

a. For customers

- What are the main challenges WestJet customers experience with the design of the check-in space?
 - How are these challenges being addressed?

b. For employees

- What are the main challenges WestJet employees experience working in the check-in space as it is currently designed?
 - How are these challenges being addressed?

c. External Factors

- What external factors are involved in the design of the check-in space?
- How do these external factors affect the design of the check-in space?

3. Service design successes

a. Effectiveness of design

- What do you think works best in terms of the design of the check-in space?

b. Area(s) of improvement

- What needs improvement in the design of the check-in space?
- What specific actions are required to improve the design of this space?

4. Service design improvements

a. Future outlook

- How is the design of the check-in space going to change?
- What decision-making factors are involved in redesigning this space?
 - What preparation or planning will be involved in redesigning this space?
 - What parties will be involved in redesigning this space?

b. Anticipation of future challenges

- What anticipated challenges are there in redesigning the check-in space in terms of:
 - Employees
 - Customers
 - Costs to the organization
 - Other—please specify

Appendix A-4 Interview Transcripts

Interview with the Director of International Operations (DIO)

- Jaime (J)** Thanks for agreeing to speak with me today. My research is looking at how different aspects of the design of the check-in space affect customer behavior. When I did my pilot observation last week, I looked at such things as the equipment, so the kiosks, things like the layout, I looked at different furniture, like the stanchions, I looked at visual cues in the environment, like uniforms and signage—basically anything that is built into the check-in space to direct customer activity. You may not be able to answer all of these questions today but really what I am doing in this interview is testing to see whether my questions work, sound good?
- DIO** Yeah!
- J** Good! So, you have signed the consent form...I just wanted to remind you that at any point in the interview, you can refuse to answer a question or discontinue participation altogether. The interview will last about thirty minutes. Do you have any questions before we begin?
- DIO** Nope.
- J** OK. What are WestJet's service objectives in the check-in space?
- DIO** Basically we are trying to get more of our guests to transition over to self-service. We are trying to streamline it to make it easy and inviting for people so that they will use self-service, and we measure ourselves on the amount of guests that are using self-service.

- J** What actions have you taken to facilitate the transition to self-service?
- DIO** Well we have done some testing in terms of our layouts and we have looked at different placements for the kiosks, we have tried different types of signage, we have tried to enhance the process by using guest ambassadors, and different ways of placing our stanchions.
- J** Does the current design of this space reflect what you have discovered in your testing?
- DIO** Well yeah, basically what we are trying to do is get the same look and feel in our bases so that when guests fly around in our system they know what to expect and they are comfortable working with the layout we have. I don't know if that answered your question though?
- J** Yes I think so. How do you think the goals of this space reflect the overall goals of WestJet as an organization? For example, you mentioned how the goals of this space are to streamline the process and make it easier for the customer to navigate this space.
- DIO** Well I mean, we do want to promote self-service and keep our costs low by doing so, and as you know, we are looking at adding in a regional model. With regional, it will be even more focused on self-service because that is a very low cost model. It is just the direction we are heading in.
- J** How do you think the self-service model affects the customer?

- DIO** I think it is quicker for them, so when they come to the airport they don't have to, you know, they can immediately start checking themselves in and getting ready and the ones that don't have bags can go straight to security and to the gate. The people that do have bags go to the bag drop line, which is designed to be faster than the regular, traditional check-in.
- J** What external parties are involved in the design of this space?
- DIO** Well we are actually switching to, well I don't know if this accurate, and Jaime, you will have to check because I think we are using IBM now but I'm not sure.
- J** OK...
- DIO** The kiosk provider is involved in working with us externally. Um, and really, the rest is all internal, well I mean we look at other setups from other carriers, so we get ideas from that and we adopt what we like and of course, we know what to avoid as well by looking at other carriers and their setups. And then the rest is mainly internal in terms of our planning department.
- J** Would that be my [internship supervisor]'s department?
- DIO** No. She is real estate, so she basically would be responsible for making sure we have the space that we need to place the layout and then she would identify what we needed in terms of how many stanchions we need given the square footage. She would also identify what signage we need, and then she would go to the planning department and they would get involved in terms of how

many kiosks, where they were going to be placed, and that kind of thing.

J How does the planning department decide how they want to layout the space? I know you mentioned that WestJet looks at other carriers...

DIO Um yep, they can do computer simulations, so they can go in and do computer simulations of like...obviously what we want to do is we want to have all of our guests checked in within a certain window of time, so they'll run different simulations trying different numbers of kiosks and different queuing formations, and then they make assumptions about how many people check-in. Do they check-in one at a time? Or in pairs? Or whatever? And then they run the computer simulations, which shows, really, what they should have there in terms of kiosks and agents.

J OK. Do you by chance know what that window of time is?

DIO Oh, you will have to ask them. Our target is a little bit different. There are two different types of targets, there's one for domestic flights because those are fairly straightforward and there's also one for international flights because there is more work involved in terms of scanning the passport information and entering the place where you are going to stay, so it takes longer to check-in for an international guest than a domestic guest. So there are targets for both, um I forget what the name, there's a name that they call it, there's a term that they use to describe the handling time, but there are different targets.

- J** OK, yeah 'cause I know that when I was doing observation, the average time it took for a customer to get from the kiosk to the bag drop line was about 6 minutes, and this was during peak hours whereas if they had to check-in and drop their bags off that took about 10 minutes.
- DIO** That was wait time though, that was not contact time right? With the agent?
- J** Oh yes that was wait time.
- DIO** Yep.
- J** So you measure in terms of contact time then?
- DIO** Well there's both, so there is queue time, how long are they in a queue, and then there's contact time, so how long, you know, what is the amount of time they spend with an agent getting checked in or what's the amount of time...I don't think they call that at the kiosks but basically that is what it is.
- J** You identified that one of the benefits for the customer was that by changing the layout of this space to a self-service model it would provide quicker service. But can you identify any other needs of the WestJet customer?
- DIO** Well you know, we used to make the assumption that WestJet agents are friendly friendly which they are and that therefore all of our guests would love to spend time with a WestJet agent. Now we've changed our thinking to realizing the fact that we have more

business traffic than we used to and so the business traveler, they want to come in, get checked in, and go straight to security. And in most cases, and you know, not that they don't want to talk to our agents but we realize that it is not at the top of their list. Top of their list is getting to the gate, getting on their flight, and getting to their meeting on time.

J Is your main customer a business customer then?

DIO Um, yeah I'd say a lot of them, you'll see a mixture at the kiosks for sure. But it is a product that business people really like. Like when I travel, I've been travelling on Delta quite a bit lately to the states, and I always check-in either online or at the kiosks and I never go to check-in.

J So you would be an example of a business customer then?

DIO Yeah.

J What about the other types of customers?

DIO Oh vacationers do it. More and more we are getting people that check-in online and just go to the kiosks and print their boarding passes. I'd say that people, well it's to everyone's advantage to check-in ahead of time, because you can preselect your seats without paying for them. There's a few different models, Jaime, so you can, when you are making a reservation, say you phone in or go online to make a reservation, you can pay for a specific seat at that time or you can wait till the 24 hour mark and pick your seats for no cost. And then when you go to the airport, like if you didn't have a printer

at home, you can come to the airport, print your boarding pass on a kiosk, tag your bag, and away you go.

J Can you reserve your seat at the counter through an agent?

DIO That would be through the normal check-in process, yes.

J But if you did check-in 24 hours ahead, do you have priority over the customers that do it at the check-in counter?

DIO You would. Now I'll tell you, one time I checked in somewhere, I think it was in Toronto? Where I checked in but I didn't have a chance to print my boarding pass and then when I got to the airport, I didn't talk to the ambassador. I just got in the queue and then the ambassador said, "you know you can just print your boarding pass on the kiosk you don't need to go up and talk to an agent", so I just printed my boarding pass. I had carry-on and so I went right through to security. I had already reserved my seat 24 hours ahead but I just had no way of printing my boarding pass.

J What is the role of the guest ambassadors?

DIO Just to help people, some people find the self-tagging challenging. We know that that video that we have is...that's not what we are going to have on our new product, because it's not very intuitive. So on the new product, I haven't seen it but apparently it's going to be a lot easier to figure out the self-tagging. So they're there to direct people as to what line they should be in based on what they're trying to do and to show them how to use the kiosks if that's what their option is.

- J** When are the kiosks going to change?
- DIO** I think the product is changing over in May but don't quote me on that...it's pretty soon.
- J** How long have you had the current kiosks?
- DIO** Oh I don't know.
- J** OK. Is this the first round of kiosks?
- DIO** No. About um, I'd say, well today is my fourteenth anniversary so...
- J** Congratulations!
- DIO** Haha thanks. I would say about 12 years ago because I was the one who launched them. Everybody laughs because it was a product called touch and go and that was my project and I worked with IT and we installed them in a few of the bases and then it has evolved since then.
- J** Is the design of the check-in space going to change with the new product?
- DIO** Maybe, I don't think so. Well maybe...I don't think so...but maybe in the regional bases we might look at a model where the kiosks are built right in on the front of the counters and then what might happen, like Southwest already has this, like they have one agent behind the counter that looks after four positions, so people would walk up to the kiosks, check themselves in, and then the agent

behind would be there to answer any questions. But I don't think we'll ever go 100% away from traditional agents, but I'm not sure.

J Why do you think that?

DIO Well because I think there's still a percentage of people who have unique needs where they need to talk to an agent and maybe not everything they need can be done through automation.

J How does the transition to a self-service model affect the agents that work in this space?

DIO Well um, you know this is between you and I...

J Try to frame it in a way that I can transcribe it, if possible.

DIO Well I mean you wouldn't need as many agents behind the counters as you have today, we would transition more to a model of agents that could circulate and help our guests as they arrive, in other words, they have more of an ambassador role rather than the traditional behind the counter model where you have one behind each counter.

J So the agents or ambassadors would basically facilitate the transaction for the customer?

DIO Yeah, it would be like they'd greet you when you came in and they'd say, you know, "what do you need to do today?" and whatever, and they'd guide them and help them, rather than the traditional standing behind the counter model.

- J** In your opinion, what are the main challenges you have in the check-in space right now?
- DIO** Probably trying to gauge the right number of people to staff at the bag drop locations, so that the bag drop lines keep moving fast because when people check-in either via the kiosks or via the web, they want to come to the airport and drop their bag quickly, if they have one, and run. So they get mad when they come and they have to line up and they're in line just as long as everybody else. And then they say, "hey wait a minute, I went to the work of checking in at home, so you know, this should be quicker". So that's one challenge and the other challenge is teaching people and getting people comfortable with applying their own bag tags.
- J** Yes, I can attest to that!
- DIO** So that's going to get simpler. I believe we are looking at a different style of tag right now that is easier to apply. And as I said, that video will change as well.
- J** How will the video change?
- DIO** Well they are doing a new...they're doing something different. You'll have to ask the planning guys but they realize that the video that's there now is not as effective as we'd like to see.
- J** What are the main challenges the agents have working in this space as it is currently designed?

- DIO** Well I think they have to, you know, we challenge them with flexing up and down so they have to gauge, like they've really got two queues in front of them, they've got the traditional queue and the bag drop queue, so they have to know when to flex and pull from each line so they keep both lines moving while giving the bag drop line the fastest service. So that's I think their challenge um, and then the ambassadors of course, their challenge is to make sure that everyone is getting into the right line so that they get the service that fits what they need to do.
- J** Is there a ratio for ambassadors to guests at a given point in time?
- DIO** No, but you can ask the planning guys, there might be a ratio of ambassadors to the number of kiosks, not sure about that.
- J** OK, I know when I was observing there was one ambassador on duty.
- DIO** Yeah.
- J** Are there external factors present which limit the design of the check-in space? What are they?
- DIO** Um no, I would say that the stanchions, that defines our area. It's interesting because we are going to a self-tagging model in our new terminal in _____ in June. And the airport wants us to do it without using stanchions and we are saying, "wow, how would that ever work"? 'Cause then people, they don't know where to go and there's no set queues and that'd make it really hard for the agents like, we don't know what's going to happen with that one.

J What about working with the airport authority for instance, are there certain restrictions that they impose?

DIO Oh, they may define how we can place the kiosks. So there are two types of kiosks, Jaime. There are common use kiosks, where you can have 5 or 6 airlines that have their applications on one kiosk and all you do is select WestJet on the screen to bring up the WestJet application or in some cities, we have our own kiosks where we are the only airline on that kiosk. Generally speaking, in the big airports like Toronto, Edmonton, Vancouver, Calgary, Montreal, they're common use and in the smaller cities, like say, Saskatoon, Regina, they're WestJet kiosks.

J What about the domestic space at Toronto Pearson are those common use kiosks then?

DIO Yes I think they're cu-d, that's what their called, common use devices. So you can tell when you look at them because all the airline logos come up on the screen and it's up to you to select one.

J Do other airlines use your check-in space?

DIO No. Because our back wall signage is all WestJet so that's where WestJet guests go to drop their bags. But, check when you go next week, but if those are cu-d, that means that another guest could use the kiosk but then they wouldn't get in our lineup to drop their bag.

J Oh I wonder...do you know whether other guests from other airlines use your kiosks?

- DIO** I don't think they do. Because most of the major airlines have kiosks in their vicinity so intuitively the guests would just go to that airline, use the kiosks in front of those counters, and then queue up. But the idea is, throughout that airport, throughout terminal three, that any airline should be able to operate from any counters or any kiosks, but they don't move us.
- J** That's really interesting.
- DIO** But potentially, well I mean that's the whole problem with big airports today, Jaime, all the big airports went common use but then they still let the airlines stay in their original space. So it didn't really give them any extra flexibility. There are some airports in the US where we do actually change counters from time to time because the equipment is all queued.
- J** How does WestJet brand itself in a common use space?
- DIO** Digital signage. And there are different types of signage, I mean there is the arrival/departure boards, we put our logo on there beside our flights, then there's the digital signage behind check-in, the digital signage at the gate, the digital signage in baggage, where we get to put our logo. When we move into a common use terminal, everything is digital, and all the equipment on the counters is common use so we don't have to install any equipment there.
- J** What about the mobile signage? Such as the carry-on weight checker, baggage weight restrictions signage....

- DIO** Yeah?
- J** Do those become digital in a common use environment?
- DIO** No, you have to put your own sizing device, which has the signage in it and then you have to put your own stanchions that have WestJet on them. And then if you're in an airport that is truly common use philosophy, you actually have to put all that stuff away after each flight. So we do have a couple airports like that and, you know, it's tough because those stanchions are really heavy.
- J** Yeah and that seems like a lot of work too.
- DIO** Oh it is yeah.
- J** What do you think works the best within the check-in space right now?
- DIO** Um, well I think the layout. They've done a lot of experimenting with the layout. The layout in Vancouver is actually the best, and in Toronto, they wouldn't let us do a true flow-through. So in Vancouver, they've got the kiosks set up like in Toronto, so the guests tag their own bags, then the guest goes back and there's an agent behind a counter that scans the bag tag, and then the guest puts their bag on the belt. And that's called a flow-through design, and we wanted that in Toronto, but it's not available right now. So that's the premium, Vancouver is the premium set up for that, well, Calgary has that too.
- J** What happens to guests that can't lift their own bags?

- DIO** Um, well I mean an ambassador or agent would help them out. I mean they had to get into the terminal, right?
- J** That's true.
- DIO** So you know they're either using a cart or...
- J** OK. I'm just checking to see that...we've gone through most of the questions.
- DIO** And then what about if you send me the questions?
- J** I can send you the questions.
- DIO** Yeah, I don't need my answers but send me the questions and then I might have some suggestions too. There might be some, when I see them, there might be some things we didn't think of.
- J** I'm finding that um, your answers provide me with ideas about new questions, so I think that that is really great.
- DIO** OK.
- J** What future challenges do you anticipate in making the check-in space more self-service focused?
- DIO** Um, well I guess some, potentially...you had asked me about you know, "do the airports give us any challenges?", so a lot of it, you have to get the proper foot print so that you've got enough space for your different types of queues, so that you are not crowded in

there, that the kiosks aren't crammed together, and also, you have to have a wide enough concourse so that the people using the kiosks aren't virtually in the way of the people trying to walk through the concourse. So in some of the older airports that are really narrow, this probably wouldn't work. You would have to have your kiosks in a different place.

J In a common use environment how does the design of your check-in space affect the other airlines?

DIO Well I mean your check-in space is what you have to work with in front of your counters. So if potentially, if you thought, "OK I don't have enough space", you'd have to rent more counters right?

J But in changing to a self-service model, where there are more self-serve kiosks and less agents, theoretically say, American Airlines comes in there and there is not a standard check-in model...

DIO Yeah, every airline has their own.

J Oh OK.

DIO Yeah so, for example, this is going to be interesting for me because when I go to _____, I'm meeting with American Airlines and they want me to operate on their counters. So I'll probably see a whole different model that doesn't even look like ours. But that's kind of different too Jaime, because in Canada, they're actually trying to make all of the stations look pretty much the same, but in the US, because we're really small there, I have to work with whatever they have. So in _____, there's a possibility I will be putting stanchions

across from check-in up against the window because if I put them in front of check-in, that would take up all of my queuing space. So in the states we tend to work with what we have whereas in Canada we are big enough to say what we want and the airports usually work with us.

J That makes sense. I think we have covered everything, is there anything else you'd like to add that we haven't already covered?

DIO Well no, but if you send me that list of questions I may be able to add a couple in there. Yeah because, it's hard because I already know exactly what our model of the future is but I can't say too much about it here.

J Like you, the other interviewees have to sign a consent form, which states that at any time they have the right to refuse to answer a question and that all information provided will be made public.

DIO So really, that will be, when you interview _____ and _____, they'll know exactly how much should be said because they are the planners for the future.

J That's good. Well thank you for agreeing to participate in the interview today...

DIO Well you're welcome!

J You really helped me get a start on my research by providing me with useful information. Bye!

Interview with the Senior Analyst of Operations Research (SAOR) and the Senior Manager of Operations Research (SMOR)

Jaime (J) OK, so you both read and signed the consent form, I am looking at the design of the domestic check-in space at WestJet and specifically, at Toronto International Pearson airport, and I'm looking at how all of the individual elements like furniture, equipment, employees, branding, and layout communicate with customers to direct their activities and behaviors in this space. This is a really casual interview, just a conversation. Do you have any questions before we begin? [Pause]. So my first question is: what are WestJet's service objectives for the check-in space?

SMOR Um, convenience, ease of use, a friendly environment, and as stress-free as possible.

SAOR Along with that, a quick check-in experience with options as well. I would say having the ability to use whatever option you feel comfortable with.

SMOR Interact with us the way you want to interact with us.

J So what does that mean?

SMOR Uh, if you're say an older couple that doesn't travel very often, is not familiar with the processes and facilities, they can go to a full-service desk. If you're a rogue warrior, you're in the airport 3 times a week, you just go to the kiosk as quick as possible, and you just help yourself. You know what you're doing and you're through there in the least possible amount of time, so you get some degree

of choice as to how you want to interact.

J What type of planning do you do to reduce the stress for the customer?

SMOR Um, signage for sure, we try and keep the lines to a reasonable length, nothing is more stressful for the average person than standing in a line that's not moving and your flight is going to leave. You're looking at your watch and you're going 'come on! Hurry up!' so the less time they stand feeling like they're wasting time, the less stressful it will be.

SAOR I guess I just want to add to that question, so what type of planning specifically do the two of us do or?

J Um, well maybe actually what would be better is if you could explain specifically what your role is with the check-in space? That would probably be a better place to start.

SAOR OK, there are a couple things we do. We assist the guest services group in determining requirements for a couple of different check-in elements. So number one is when you arrive, for example, at the kiosks, so how many kiosks do we need for a specific service level, for example? No waits. The second part of that is, you know, as we start getting further into the process and you have your queuing, so how much queuing space is needed? How long do you wait in the queue? All the way up to the counter requirements, so how many agents? How many resources do you need to successfully check those folks in?

J OK, so how do you determine those amounts?

SAOR We use two primary, actually three types of analytical tools, operations research tools. So first one is, before you can model check-in or determine all those requirements, you need to have data, you need to observe the system. So we use time studies, so we have folks, a lot of times we get them from the airports or various groups to come in, uh, they use handheld electronic PDAs and they measure all our service times at these specific touch points, like at the kiosks and at our assistance counters, at our self-serve bag drop counters. Then we get that data back and we start using it to describe the system. So we'll build, how familiar are you with statistics?

J Uh, I've just taken the required statistics courses in business.

SAOR Perfect! So you know everything can be described in distributions, for example, you have your bell curve and all that. So we build these distributions and then what we do is we have some really funky simulation tools, [inaudible] is actually the package that we used to use, we now use a brand new one, which is 3D, I can show it to you later.

J Oh neat, yes!

SAOR In modeling that particular system, so determining, you know, our inputs are like the flight service times, and then what it does is we get all these funky distributions of people, time, and then we're able to simulate that variability. From that what we'll do is we'll usually take that over, we'll prepare a quick report, and we'll send it to the guest services folks, who will then hopefully take our

recommendations when they do design that facility. Basically, we try to recommend based on what their service targets are.

SMOR So it's really a computer model that behaves very much like the real world system, and by changing the number of arrivals, the number of departures, we can say 'if you had x number of kiosks, here's what your lineups would look like'. And so it gives them the ability to make changes to the system in the virtual world and understand how that will manifest itself in the real world, and they can make optimal decisions in a very inexpensive way rather than trying to experiment in the real world, which is always time consuming and expensive. We do our experimentation in the computer world and then translate those directly into the real world and so we are a lot more nimble and quick in how we can make that type of decision.

J So you'll make recommendations, like you were mentioning about how much counter space you should have, how many kiosks you should have, and actually I just interviewed the [Director of Planning and Support], and he said that in some of your bases, you're more limited as to what you can do in terms of the design of the check-in space, so how do you work around those limitations when you're testing different models?

SMOR Those are built right into the individual models so they are spatially accurate.

J Oh that's interesting,

SMOR So we can see, if you have this many square feet, how congested is it going to be?

- SAOR** You know, to add to that, these models are great for selling, for example, if there are space constraints we can take a visual of this model and we have a 3D animation, a movie, take it to the airport authority and say 'hey, we have issues here', and then with those it helps tell the story of what potentially could happen.
- J** Especially because with the new 3D model, you can actually just see everything as is.
- SAOR** Yeah.
- J** So [Senior Manager of Operations Research], what do you, what is your role at WestJet, can you explain it?
- SMOR** I run the operations research team, um, so that means I don't do anything [joke]. Basically, I guess my role is as much coordination of the projects, assisting [the Senior Analyst of Operations Research] who actually builds the model, I talk about technical issues and approaches, I do a sanity check on the results, so a lot of that type of work. Occasionally I'll build the model but generally not.
- SAOR** He's a teacher.
- J** A teacher?
- SAOR** Yeah I would say a mentor, like that is probably his biggest thing for us though, that's what you feel like to me anyhow.
- SMOR** Sometimes.

- J** OK, so what main challenges do you experience in the check-in space as it is currently designed?
- SMOR** In our processes?
- J** Uh, sure.
- SMOR** Uh, good data that is always the problem. Building models is always relatively straightforward, we know how to do that, but getting truly representative data is always a challenge because if we don't have good data going into a model, well we're not going to get results coming out the other end. You know, and sometimes it's hard to impress on operations people the need to be accurate when you're collecting that data. There's always the tendency to say 'oh yeah, head office wants more stuff', but that being said, once they see the results then they buy in a lot quicker. They're like 'oh OK, now I know why you wanted to do this', so that's always a challenge. I would say the other challenge is getting the management of guest services to really specify what their objectives are in terms of service levels and queue times and that type of thing. Like all management, they want everything everywhere at no cost. And they say yes to everything and we'll say 'well you can't do this and that' so, you know, it's getting them to specify what trade-offs they would like to work with.
- SAOR** I kind of echo [the Senior Manager of Operations Research's] comments, the one thing I find difficult is you're dealing with frontline employees, you're dealing with the management at the airports who actually kind of, you know, weigh all of these processes, and then you have the guest services folks who are here and a lot of

times there's a lot of expectations and different levels, and different, what service means to everybody. There's no really common, a lot of times there might not be common ground.

SMOR

Conflicting ground.

SAOR

Yeah, so we build a model and it's almost like we have 3 different clients.

J

So your clients are guest services...

SAOR

Guest services, the airport management at that specific airport, and frontline employees like CSAs. That's extremely important and, a lot of times all 3 groups don't exactly have the same vision, so it causes, we're trying to model it as an as-is check-in process, which can be challenging because of that. A lot of stuff we model too, and the requirements are counterintuitive to what people would think.

J

OK, and how so?

SAOR

Um, the amount of kiosks, for example. I guess what I can use as an example is, people say 'well you can't get away with just having 26, you need 36', no, if you trust the model, the analytics that went into it, the inputs, um, 26 will do the job.

SMOR

'Cause often it's a risk aversion, uh, when your performance is being judged on how long your lineups are you will tend to want more resources than you truly need. So it is a matter of building trust and we've done very well at that. Different groups have started to come around to saying 'oh yeah maybe the model IS correct and we

don't need to overbuild', and that saves WestJet as a whole, a lot of money on the capital costs. Putting in additional kiosks is expensive and if we can achieve our service level expectations, at a lower cost, then that's value added, and in theory, we ultimately translate that to lower ticket prices for our guests. So you do have that element of trust in the accuracy of the output and the fact that managers are being judged on their performance and they are risk averse.

J So what is the optimal number of kiosks?

SMOR Uh depends by airport.

J By airport? OK.

SMOR And there are a lot of factors that go into that, um, how busy is the location? What is the guest behavior like? What's the physical space like? How far do guests have to walk? So lots of different considerations go into that.

SAOR I can further kind of add to that, to the optimum kiosks, it's like [the Senior Manager of Operations Research] said, what we've kind of done now is taken a proactive approach that gives the business unit, like guest services or planning and support, the option of saying 'OK, we can fit 6 kiosks in this area or this many counters, what will it give us for service time?'. So, kind of creating a bit of a table to preselect that or get an idea of what it could be based on certain parameters.

J And in spaces where you have more flexibility as to layout, do you design different layouts than you do in say, a more common space

(less flexible) environment. Is there an ideal layout?

SMOR Um, no because the flows in each physical space are different. Some airports are long and thin; others are short and wide, so yeah, you really don't know in advance. And as the operations research team, we don't make decisions, it's [the Director of Planning and Support] that makes decisions. We help [the Planning and Support team] to understand the trade-offs.

SAOR Yeah, that being said, my previous role to the operations research team was to design generic layouts, standard looks and feels, like the Wal-Mart's and McDonalds of airports, to try and fit a specific standard in there. Um, for signage, there was a concept that I think is still working in some airports called flow-through for check-in, so I won't go into that but uh, that was our first attempt, kind of, to adopt a standardization of a process that would yield some benefits for the guests at WestJet. Since then, the evolution, I would say, of self-service has, the [Planning and Support team] is constantly thinking of new processes, new ways of doing things, same with the airports, because they have the power to make those changes. So, that standard look and feel doesn't really exist anymore but what we're able to do is, is we're able to assist these groups, the operational groups, even the airports, and say 'well that may not work the way you have it but try this' or develop alternatives, help them, assist them, give them the tools to make it easier on upper management.

J In collecting data do you also look at the feedback from the customer?

SMOR No we don't. Uh, what we do is look at an after-the-fact analysis of data. Are we achieving the anticipated service levels? So it's that type of comparison, we thought we were going to get this result, did we get that result? And generally, we have been doing very well with that.

SAOR It's a, you know, for example right now we have an ongoing project in Winnipeg where the team is collecting data around all the processes. We're using that data for two different things, one of them is, we are moving to a new self-service application so the self-service team is requesting that we benchmark our current process at the kiosk with what will become there so that we can see any differences, you know, do we need any more resources? Or less resources? And secondary to that is the local team is having issues with queuing and they've asked us to look at alternative queuing models for, just basically to help manage day-to-day operations.

J And what type of models are you looking at for queuing?

SAOR Um, well there's a couple different types because Winnipeg is a brand new airport, it's been in operation for about 4 months now, and there's challenges around, right now we have one common entrance, you go left or right depending on which process you use. The trouble is, Winnipeg is one of these, very WestJetty, they love to talk to the guests, they love to do all that stuff, which slows down processes. So now we're starting to see our baggage drops, where the guests line up to drop their bags, we're starting to see some

lineups occur. Same with the full service, the assistants' line, we're starting to see backups occur. There's been talk that's because we're blending transborder with domestic and the service times are going up, so we've been asked by the local team to help them describe that problem to understand that problem through a simulation model. So, in this case, simulation is being used to, kind of, problem solve. Not necessarily is it going to design a system visually for everybody to see, you know, what is kind of going on and how can we look at different options. So, in Winnipeg, for example, we might move counters so we have more queuing space to one side to adjust to that or maybe we need more staff during certain periods of time.

J Are you finding that there are different needs across bases? Like do people react differently in different bases?

SMOR Yes, significantly. Small bases, things like Abbotsford and Palm Springs would fall into that as well, that it's a nice, small, friendly, little airport and you kind of just walk right through everything and it's great. Um, and then you get the big monolithic places like Vancouver, Calgary, Toronto and people behave differently in that type of space. So yes, people's behaviors are different, um, they show up for flights at different times...

J I guess different types of travelers too?

SMOR Different types of travelers, well you know, if you're trying to get from Ryerson to Pearson, it's a long drive and you know that everything is going to take a long time at Pearson, so you start arriving for your flight 2.5, 3 hours ahead of time prior to your departure.

- J** Yeah, oh I know!
- SMOR** Um, if you're in Palm Springs or Abbotsford, 'meh, flight leaves in about 45 minutes, I guess I can head to the airport', and you walk in, you check-in, you go through security, and you're done. So yeah, behaviors are very different and that changes the risk profiles.
- SAOR** So that behavior [the Senior Manager of Operations Research] just described, we call it an arrival curve. So, at the beginning, we look like 3 hours out to just 30 minutes or an hour out from departure, and you can see, there's this mathematical, again I go back to distributions, of when people arrive. So, trouble is, you cannot really predict human behavior when it comes to arrival curves, one day they may all show up on this arrival curve, other days, because maybe it's snowing in Abbotsford and people don't know how to drive in that snow, they could all arrive just before the flight leaves. Or they're all on a certain flight, they're going to Palm Springs, so they all want to show up at the airport really early. Or the whole flight could be full of standbys so they're there way before they need to be.
- J** Yes!
- SAOR** So predicting that arrival curve is, that's the value of simulation, it's never guaranteed...
- SMOR** It allows you to incorporate random behavior.
- SAOR** Yeah, 'cause you can't predict people's behavior a lot of times.

- J** No, so the simulation allows you to play around with different arrival times?
- SAOR** Yeah, correct.
- J** But then how do you plan for, like for example, in a base like Toronto where it takes a lot longer and people may not leave themselves enough time as they need, um, how do you plan to get people moving through that space so that they make their flight?
- SAOR** So there are a couple of concepts here, so number one it's the variability of that arrival curve, the simulation is extremely powerful...
- SMOR** So it doesn't change any of the behaviors, it just allows you to understand the risk that you face under different configurations.
- J** I understand.
- SAOR** What will happen at each point, so there's a concept in what we do called the theory of constraints, which is a really really cool concept. What it means is basically, bottlenecks throughout the process, so you know, it's like getting onto the Deerfoot at specific times, there are bottlenecks...
- SMOR** In terms of check-in, one way to visualize that would be, if you are hit with a big group of guests checking-in relatively late, and you want to make sure you get them through on time, uh, are there things that we can do to expedite behavior? So, we already do a lot of that right now intuitively, we canvass the line and you say 'anybody going to XXXX?', and you move them up to the front of the

line and you process them first, and people with later departures you ask them to wait longer. And so, by being able to model that sort of responsive behavior, we'd say 'you could clear a bottleneck in this amount of time'. So again, we can use it in a way to model recovery processes, if something does go awry. But generally, we do try and incorporate the random behavior and say 'if you do this, here are your risks', but if a risk doesn't materialize, 'here's some strategies for dealing with it'.

J Do you look at patterns in customer behavior?

SMOR Yes, that's what we base it on. There is a pattern that ranges over these values, um, so you're not changing the overall pattern but you're just saying 'sometimes it's up here, sometimes it's down here', but the amount of times it's here and the amount of times it's here, that's always constant. And over any given year you're going to have X number of bad days, you just don't know which ones they are yet.

SAOR It's a lottery for the most part. Except we know the 23rd of December is always crazy so it doesn't matter. It's always the 23rd.

J When everyone is flying.

SAOR Yep, you know, to further those patterns, for example, you know, I can describe the pattern here that we know X amount of guests are going to check-in at home, so there's kind of a pattern now that we know because we have really good data and we can understand that. Um, so that pattern drives a lot of decisions, uh, you have these decision points where people are going to go there, they're going to go there, they're going to stay there, they're going to stare at the

screen, they don't know, but there's a random chance. So it's all like Vegas...

SMOR That's why they call it Monte Carlo,

SAOR Yeah, Monte Carlo simulations.

J That's what it is?

SAOR That's what it's called.

J OK.

SAOR But you can describe, and the more repetitions of this process that you run a simulation, you can get a really really good idea. You know, for example, going to Vegas, if you're there gambling for like, months on end, you're going to realize that 'yeah the casino slightly has taken my money, day by day', the odds are like 48 to 52 but it's very subtle so you don't know it. I went to a simulation conference [in Vegas] and one of the keynote speakers was talking about, we call it the law of large numbers, so you know what? People actually do win the lottery more than once, like the big jackpots, 'cause the amount of lotteries that happen, the amount of people, those chance events can happen really close to each other. But we tend to react to, at WestJet, we tend to have two big events that happen side by side, we think we have a huge issue when actually it's just life. Part of what we do is kind of educate people on 'it's just two random events'. I don't know, good description?

SMOR Yep.

- J** So how often do you run simulations after you've put the design or layout in effect?
- SAOR** It varies on airport to airport, if there's specific issues or requests.
- SMOR** Usually, the people on the ground, the frontline people, start noticing breakdowns on the performance metrics, people start noticing a deterioration in metrics and so when that happens, they say 'hey guys we should revisit this particular facility, now let's rerun it, see what has changed'. And, a good example of that is, like your iPhone, um, 10 years ago those didn't exist and everybody went through a full-service check-in. As these technologies are introduced, the adoption rate of them starts changing, uh, you have your early-adopters who feed off the process, and if those are the people we collected data on, that's one set of behaviors because later and later when adopters keep coming in, more people start using the iPhones or the blackberries or whatever smart technology, the models no longer represent the real world, so we have to update. So it depends on how fast things change, um, the faster change happens out there, the more we have to re-specify our models, and most of those are triggered by, we see a change in what's happening at the airports. That's the usual trigger.
- J** Do you take into account different types of customers then? Like the business traveler, the family...
- SMOR** You know, we don't really break it down that way, um, because that's purpose driven classification and we don't know their purpose so we break it down more behavioral: 'did you check-in online? Did you check-in on the kiosk? Did you check-in in full service? What did

you actually do?’ and so it’s just those observational data points that allow us to classify.

SAOR Further to that is getting too much detail might not change your answer. So if you start getting into all that little stuff, your answer is going to be the same in some cases than if you kind of look at it generally. So the model needs to be simple enough but detailed enough, there’s a kind of a trade-off.

SMOR You know, in a lot of the cases, the effort to go into all of the detail will not yield different results.

J OK, well we are at the 30-minute mark, is there anything else you guys would like to add before we end?

SMOR It’s an ongoing process and um,

SAOR If you’d like to come and see one of these models, just as an example, to understand it, we’re just over here so?

J Yeah, OK! Thank you very much for helping me out today, nice meeting you!

SMOR No problem, my pleasure.

SAOR Thank you.

Interview with the Director of Planning and Support (DPS)

- Jaime (J)** Thanks for meeting with me today! As the consent form states, I am looking at how the design features of the check-in space communicate with customers to direct their behaviors, this includes everything from signage, the kiosks, branding, employees etc. Do you have any questions before we begin? [Pause]. OK, what are WestJet's service objectives for the check-in space?
- DPS** So what we want to achieve, our overall goal is to be able to get guests prepared for check-in prior to getting to the airport, we are not quite there yet, so what we want to be able to do is move guests through that space as quickly and efficiently as possible. But the main thing we want to do is try and remove some anxiety and put control into their hands as to what kind of experience they want.
- J** OK.
- DPS** So, it's a little bit, you can't always, it's not a question of 'are we just serving our guests and giving them exactly what they want?' because we need to meet the business needs as well, right? So efficiency is big on our side, minimal amount of FTEs with maximum amount of guest experience.
- J** And sorry, what are FTEs?
- DPS** Full time equivalents, so people, so the amount of people that you actually have, uh, you want to have the right level, from a cost perspective, that doesn't degrade the guest experience. So, how fast does a guest think they should be moving through that line? Are

they happy with an 8-minute line? A 10-minute line? A no minute line? And that scale varies dramatically, and what we try to do is hit a particular metric that satisfies both that guest experience and satisfies our costs.

J OK, and you mentioned that there is anxiety, so what type of anxiety do customers have?

DPS It's generally the entire airport experience, you know I have been in the business a little over 30 years and generally, what happens is it's a high anxiety moment of the travel continuum. And so, I have to go into a line, I have to make sure my documentation is with me. Did I leave something at home? Did I forget my passport? Do I have my ID? I can't remember what I was supposed to bring, I hope my reservation is there, I don't know if I'm going to get a window seat, I don't know if I'm going to get seats together with my family. All of those things go through people's minds as they're getting to the airport and they're getting anxious. Is there going to be a line at security? You know, all of those things go through, especially folks that don't travel regularly. People that travel regularly kind of have a routine, they know exactly what they are going to do, you know they do the wallet, passport, blackberry...

J They're familiar with the process and the space too.

DPS Yeah exactly, they're going to do, they know which line to use to go fast, they know which kiosk to go to because no one is ever at it, those aren't the people we are worried about, it's more...we worry about those people because we want to give them that fast path opportunity, but we have to worry a little bit more about the people

who just aren't familiar with the airline experience. It's grandma travelling, it's a mom with two kids, it's not the business traveler...

J That understands what to do?

DPS Right. So we try to balance those things out, so that's why we kind of established what we've done. The self-tagging component of what we've done is really for the experienced traveler but the self-tagging component, our surveys have shown, if you use it more than once, your experience is considerably better and your acceptance of the program is considerably better as well. We've seen about a 20% increase in likeability, they like it, they see the benefit of it, first time they see it, they hate it.

J Yeah?

DPS Yeah, well not hate it, first time they see it they're more shocked about 'what's all this about?' and the way we read that is it drives that anxiety level. Because I came into an airport thinking I just went to a counter and now 'what, I've got to go to a kiosk and what, I've got to put a tag on?'

J They have to be in charge of the process themselves,

DPS But they don't see that side, they just see 'I'm out of control', 'I don't know what I am doing', 'I am not comfortable with this', 'I need to ask somebody' or 'I have to follow instructions', 'oh that took me way too long'. Second time they do it, they know, they go directly to the kiosks, they do the transaction, they get the tag, they put it on, and then the results we get from people that have used the product more

than once are significantly improved. And any time after that, the improvement rating gets considerably higher and higher and higher.

J So are there any steps you take to ease that transition from the first time traveler to the more experienced customer?

DPS That's the challenge that we've got today internally with our systems, so we are taking steps. We are in the midst of a self-service initiative, a corporate initiative that does that. It's going to prepare the guest better for travel, it's going to include a notification system so we'll be able to prompt you with messages prior to arriving at the airport, to tell you what your experience at that specific airport will be.

J Oh that would be interesting,

DPS Right. So when you're going to Toronto domestic, travelling domestically, you know, we are going to send you a note in advance of check-in opening to remind you that there's a bag fee, remind you that there's this, give you a link to the capabilities, 'is there restaurants on the other side of security?'. So we're trying to put more information in the guest's hands before they even check-in to help them ease that anxiety level when they get to the airport. When we get you into the check-in window at 24 hours, we're going to give you better messaging that says 'OK, now you've checked-in and selected your seat, when you go to the airport, go to a kiosk and get your bag tag', where today we just say 'go to the bag drop'.

- J** Now, so are you trying to get more customers to use the self-service kiosks?
- DPS** Yeah absolutely.
- J** Instead of the guest assistance?
- DPS** Yep. So what we want to be able to do is, we think the guest experience is a relatively simple one for most people who travel. Right?
- J** Uh huh,
- DPS** Um, there's a handful that will always require assistance and there will always be a handful who just flat out say 'I paid money, you serve me from start to finish', right? The 'I don't even want to touch my bag when I get to the airport, you do it all the way through'. So we have to be able to accommodate those folks, that's what we want to be able to do, that's the reference to the guest assistance line. So that's why we're removing check-in as part of the vernacular, we don't want that to be a check-in line.
- J** Oh, I didn't realize that.
- DPS** Right? So you'll see that come in the next little while because the inference is that that's an option for you to just go and stand in line traditionally like it was before. What we want you to do is check-in, our check-in lines, technically in some of our airports now, become the kiosk line or your computer at home or your mobile device when you're sitting in Starbucks and it's time to go and check-in.

- J** Oh interesting.
- DPS** So we want to move as much of that traditional activity away from that space to new modes of checking-in. When you get to the airport, no surprises, you go to a kiosk, you know you're going to get a bag tag, you know the more you do it the easier it will be, and you'll go through the express side, we'll have the right level of staff that's standing there to make that a 45 or 15 second transaction, and make it disappear. Now your travel experience is far less anxious, you've controlled it, you knew what to expect, and then you get what you get.
- J** Hmm. Now you mentioned...what other types of guests are going through the guest assistance line? Is it just people that don't want the self-service or...
- DPS** People that don't want it, people that we can't accommodate in self-service, so maybe it may be a particular passport that we're not allowed to take or that we need to visually see from specific countries, right? So there's a lot of regulatory related issues, it could be something where there is a payment still outstanding that we can't accommodate on the kiosks, so a lot of times, people buy tickets and their credit cards don't quite cover it, so the PNR or the passenger name record goes out of sync and then we can't accommodate a check-in until we have all of the dollars cleared off. So that would be a reason someone would fail and then you'd go to the guest assistance side. It could be an inter-line travel, where they're travelling like on us to American Airlines and on somebody else, so we need to do something special with the tag. What we want to do is get as many people through the self-service option

to minimize the amount of people we need to have in that guest assistance line, right? And that's why we want to eliminate the check-in option of that guest assistance line and sort of drive people to use the self-service option. It's always there for them, there's always, you know, 'no I'd just rather stand in this line sonny, don't worry about it, I have time'...

J Yeah, less decision making I guess?

DPS That's fine, if you really want to do that but the understanding is that sometimes when you're in that guest assistance line it may, you know, the person who is ahead of you may have a 15-minute transaction where they have to make a phone call to another carrier and get some clarity on what's going on, there's always risk associated with that guest assistance line.

J Yeah, and so you mentioned earlier about specific time frames you have? Do you know what it is to get through the self-service route or the guest assistance route?

DPS Yep, well we have preferred metrics as to how long it should take for someone to get through, I mean in our guest assistance line the metric is 10 minutes, we don't want people to be there any longer than 10 minutes in that line.

J Is that just wait time?

DPS It's wait time, right? So when you're in that queue it shouldn't take you, when you enter that queue to the time that you're actually talking with someone, that should not take more than 10 minutes.

- J** OK,
- DPS** So that's our goal, uh dependent on peak you may see that increase and you might see that decrease, so on average it's 10 minutes and on average through our activation side, it's 3 minutes.
- J** And sorry, activation is?
- DPS** The bag drop side. So if you've self-tagged, it shouldn't take more than, you should never be in a line that's longer than 3 minutes, on average.
- J** OK, actually I interviewed [the Director of International Operations] for this and she was saying that there were difficulties with self-tagging, could you speak to that?
- DPS** OK...
- J** Uh, people were needing assistance from guest ambassadors or from the customer service agents,
- DPS** That's more of a byproduct of first time, 'I don't know what I'm doing', 'I'm not sure of what I'm doing', 'I don't want to do this wrong'. And then the survey results that we've done shows that the second time user is far more understanding, third time user is even more understanding, so there's definite complexity if you've never done it before. But going to the grocery store and using the self-service, uh, you're not sure where to put the milk, you're not sure what to do, you get a pop-up that says 'put your groceries on the scale or in the bag'.

J So it's a learning curve,

DPS I had to do that, now when I buy it, I immediately scan something and put it in the bag because I know that there's a weight component to this side of the machine. So it's just, you know, it's, air travel is an interesting thing for most people because a lot of people travel once a year. So if that's the case, we need people at the airport to help those people, 'cause they didn't even know what was going on, right?

J OK.

DPS So we put the program in a little over a year ago, so we are starting to see those one-year travelers travel at Christmas, and they've used it twice now so they're a little more familiar. But, at Christmas time, our survey results sometimes dip because we see a lot of first time travelers so people are uncomfortable with the process. As we get away from the first time traveler period, over Christmas, our numbers generally increase again because our satisfaction numbers are up because it's people who do travel regularly and they like the process.

J What are the demographics of your customers then? Are they mostly first time? Are they repeat? Are they business travelers?

DPS Uh, it's a pretty good blend. I would say most of them, well actually I don't know. My guess is that most of them are repeat, but not repeat to the point of traveling 8 times a year.

J OK.

- DPS** So smaller demographic airlines, generally you would have a smaller base of folks that travel 8-15 times a year, the business traveler, but they're not necessarily people traveling with suitcases that they check.
- J** No, they just go right through.
- DPS** Right? They're the savvy traveler who carefully packed their bag, and then you'll have the folks who will travel 3-5 times, so that's the group that understands the process, they've probably got a bag, and then you'll have the people that take a vacation every year.
- J** OK.
- DPS** That's it. One time traveler.
- J** I also understand that the video is going to be changing...
- DPS** Yep.
- J** How are you changing it?
- DPS** We're taking it out.
- J** Oh completely?
- DPS** Yep.
- J** So what will help customers to learn how to self-tag then?

DPS So part of it is the fact that more and more people will have used it and the product is in already, uh, so we are finding that we have far more second time users who already understand. We want to do some changes to the bag tag itself to make it a bit more intuitive, right? So something that's a little more simpler to use and a little more intuitive, and then what we want to do is simply support with the agents, but our intention is never to have a lot of agents out there because again, as people use it more, we think people will understand more, and you've done enough observations, you've probably seen a lot of people watching what the people beside them are doing, right?

J Yep.

DPS So that's a little bit of what we're going to lean on, we're not relying on it but it is a component of the guest training if you will and you look at anything else that has a similar process, whether it's a grocery store, self-service or what not, the people who are in the line waiting to use the system next, watch. They watch what they do, they are learning from the people ahead of them, they are using it, when the attendant comes to assist them, they're learning all the way through. By the time they get there, they're almost saying 'don't worry I've got this', right?

J Yeah.

DPS So we are somewhat relying on that as are other industries or as other carriers add the product. It's just going to add to the amount of trained guests that are out there. And then what we want to do is move some of the training components if you will, to the web, to the

mobile, you know, self-tagging, 'what's this?' click it on your mobile device, play a YouTube video, these are all tools that we will have at our disposal throughout the course of this year and next year that again, remove the anxiety because if they go 'what's self-tagging?' they click this link and it takes them to a YouTube video,

J They can watch it numerous times...

DPS They can watch it, again while they're at Starbucks talking about what they want to do and they'll feel far less anxious and still, the experience of having the tag in your hand and trying to figure out how to do it is still anxious.

J Yeah, and being on a timeline too,

DPS That's right but doing it and going 'oh that wasn't so bad' makes it a lot easier.

J Is the actual design of the check-in space going to change?

DPS So, a lot of debate in the industry about it. You'll see lots of different ways that kiosks are laid out. A lot of it really just depends on the concourse design, we don't own any of that space, we don't have the flexibility at the majority of our airports to create a Starbucks experience, you know, where every counter looks the same. We'd love to be able to do that but because we are in, what we refer to as common use facilities, those facilities have to be, we can make modifications to it, but generally, the intention of those is, if we had to move to accommodate another carrier, we can't disrupt that space so much that another carrier can't use it.

- J** So what type of modifications can you make then?
- DPS** Well in some airports, we are restricted as to location and placement of kiosks even so, because of cabling trays and coring within the floor and the expense associated with where you actually place those kiosks. Most airports that were, you know, circa 1980-1990, don't have all the flexibility that we'd like. New airports that are being built, like T1, right? Which we didn't get in, or like the international terminal that is being built here in Calgary. What we do is we deal with the airport authorities through the construction phase to maximize the capability of putting kiosks anywhere we want, so to have completely flexible floor plates, with cabling runs all over the place so that if we want to put them in a circle, we put them in a circle. If we want to put them in an eyebrow, we put them in an eyebrow. If we want to put them in a straight line, we put them in a straight line. We don't want restrictions. Some airports that we fly into today will only allow us, because of their hard shell floors, will only allow us to run cabling down a pole, as an example. So now you're restricted around putting kiosks around a structure because they don't want to drill holes in the floor or can't um, and they don't want poles running down, you know, you don't want a stem coming down from the ceiling to accommodate a circle. So they use existing structures to run wiring.
- J** So is there an ideal model? Like in those airports where you are working in the construction phase, is there an ideal way that you like to layout the kiosks?
- DPS** Yeah. So for today, today's philosophy is that we like the kiosks to be somewhat of a first line of entry or first line of defense. So what

we like is the separation, the guest comes in, they need to make a decision at the kiosk and then what we do is, we have an entry point. So we have that line ambassador that stays in the middle, they do an assessment as to whether the guest has completed what we require them to do and what we do is we liken that role to when you leave customs. So you travel internationally and you come back to Canada and you're leaving customs and you show them a piece of paper and they either say 'you go that way or you go that way'. That's the intention of that role: 'have you got your bag tags and your boarding pass? If so, go to the bag drop side, if you don't have that, go to this side'. So there shouldn't be a lot of debate, there shouldn't be a lot of questions, I mean guests will do that and say 'hey all I want to do is this' so that's WestJet, so we do get stalled, but for the most part, if you've got what you need you go to the bag drop side because the bag drop agent, we're slowly eliminating all of the things that they can do for you. The intention over time will be for that bag drop agent to not even be there because you'll have an automated process where the guests will be able to put their bag down, scanners will read the tag, and the bag will be ingested. It's a, there's not a lot of value added to that activation and we've simplified it so much that I can go with nominal training and within 10 minutes someone can show me how to do that and at Christmas time, I can scan bags into the system.

J Would there even be a bag drop line anymore?

DPS Yep, but what happens is you would go through that bag drop line to a bag drop...

J And then just do it yourself?

- DPS** It's automated; you would scan a boarding pass, put your bag down, and away you go. We have a trial in Montreal right now where we're doing that.
- J** OK, and how is that working in Montreal?
- DPS** It works good, right? So what we do is we have an agent that watches what people do and just directs, and that would still be the intent but we would be able to now go from having an agent per activation station or per bag drop to potentially having one agent monitoring two or three.
- J** That's interesting,
- DPS** So if you look in a place like Toronto, and you had 4 activations going on, we have 4 agents standing there, we can potentially cut that down to 2 and still process as if we had 4 agents standing there.
- J** Oh, and then you would still have the customer service agents in the guest assistance route?
- DPS** You'd still have the guest assistants, right. And then, any fees associated with the baggage that they're putting down, so they put their baggage on the bag drop, you would immediately weigh it because we don't have a facility for weighing out front. You would weigh it, if it was over our baggage allowance, the agent is monitoring you to be able to go and do an override, like you would in a grocery store, or you would say, you know, 'your baggage is 70lbs it's supposed to be 50lbs', you take the bag and you move to the secondary counter where there's one agent who is really just there

to collect baggage, as opposed to an agent at the bag drop who will try to collect the baggage fee. Now what happens is that it slows down that baggage drop line, right? 'Cause that's all built around a 15-45 second transaction and the second you have a 2 or 3-minute one because someone wants to change their seat and do something else then something else, then you see this baggage drop line with an 8 minute queue, 10-minute queue, 15-minute queue, right? And then, probably through your observations what you see is they'll bring 2 or 3 more agents quickly and now you go from 2 agents to 4 agents and the line just disappears. And then, one of the failed flaws we have is that our agents know that, so they wait for the line to build and add agents, knock the line down, wait for the line to build, add agents, knock the line down, instead of having the appropriate amount of agents to ensure the line never builds.

J Oh, interesting.

DPS So that's the difference between the planning group and the operations group; the planning group says 'never allow that line to build, add an agent in advance of when the people are coming', and operations will say 'we'll risk manage that, we will allow the line to build 'cause we know we can knock it down'. The guest experience is, 'I hate standing in a line, that's why I picked this side anyway, why are you making me stand in a line? OK now there are agents coming now finally I'm moving, OK now it's good'.

J So what I was confused about when I was observing is that some of the agents would become line ambassadors, so do they just flex to different positions in that space?

DPS Yeah they do. So that's the intention, so, because it's a pretty simple task on the activation side what we try to say is if there's 3 people standing in activation and there's no one in the queue, come out from behind and go and assist at the kiosks, right? Keep turning around and as you see that line un-build, then flex back, and then knock that line down, and then when there's no line, come back out to the kiosks. And then, so we allow ourselves to be supportive of the guests, our intention is to be with the guest as opposed to forcing the guest to do an over-the-counter transaction, they would be with you and assist you, and that's what we do at the kiosks. The intention of what we are going to do with activation will be exactly the same, we want it to be, we don't want this divisive counter, we want some sort of a flow where you go and just walk beside the agent, that's in our Vancouver counters today, they use more of a flow-through style, which is really what we're liking.

J And that works quite well?

DPS That's the style we like, the problem is most of the airport designs don't accommodate it, 'cause you need an ability to enter, use the counters and flow-through and almost all of the airports like Toronto have a structure, a structured belt behind them, so that you have to go around that belt somehow. So the new design we will have in Toronto, um, construction is going to start soon, the new design will allow that for the bag drop, it will be more of a flow-through. So, I'll get into a queue, I'll do the kiosk, I'll get into a queue, I will get activated, I will then move to the bag drop and then move through security, and it will all be somewhat in a straight line. And that's kind of the intention of the model that we want to get to, it's just that most of our airports don't allow that.

- J** That's a challenge! I'm just looking here [at my notes]...so what challenges do you think the WestJet employees have working in the check-in space as its currently designed?
- DPS** Uh, you know, I think philosophically, from the employees' perspective? You know, to be honest with you, they've liked the system, they've really liked it because it's taken a lot of the stress and strain off of them. Some of the feedback that we've gotten from agents who work on the activation side is that they're not challenged enough, it gets boring, because it is mundane and what they do is they ask not to be on that side, they ask to be on the guest assistance side, 'cause they're not on the reservation system and they're doing more, which leads us to believe that it's OK for us to keep moving forward and repurposing the agents to other value-added things and the non-value added tasks can be automated and that's why we want to move to the self-activation, right? Agents for the most part, they like it because we don't see the large line-ups, we don't see anxious guests, we don't see upset guests, right? And they're managing their anxiety, their level of upset today is a lot less than it was 2 years ago before we got the process. So, agents for the most part are accepting of it, when we come to a base and say we want to add it, they're usually ecstatic about it. Ottawa was the last place that we had it and Ottawa was, um, they were doing back flips saying 'when can we start this?'. The feedback that we still get from Ottawa even though we started it last fall is that they love it, they want more kiosks, you know? Now they're looking at how to improve it, 'give me more kiosks', 'give me faster this, give me faster that', 'guests really like that'. So, you know, I feel pretty good about having partnered with the frontline and this wasn't something we, you know, had to ram down their throats or convince them it would

be good, it took one base to put it in, um, to have it work well and then it almost became, other bases were asking 'can we be next? Can we be next?'. So, I feel really good about that...

J That's good yeah. Um, and then, we're almost at the end here, last couple of questions, is there anything about the actual design of the application on the kiosk that is going to change?

DPS Yep, so we've got a new application that's going to launch on the, around the beginning of June. Um, it adds more features to the kiosks so that there's a fast pass consideration. So today, we're restricted by that application, you can only do one transaction at a time, so if you're entering the transaction, print your boarding pass? Yes, OK. Print your boarding pass and then go back in to print your bag tags. You'll be able to do that all in one entry. Or if you only just want a boarding pass to print, you just push boarding pass to print. If you've already selected your seat, in the background on mobile or web, it doesn't take you through that whole process again. If you want to change it just says...if all you want is your boarding pass, here it is, then you're done.

J That makes it easier.

DPS And there's some, uh, some more opportunities to add fees or collect fees from the kiosks, there's the ability to change your flight for a fee, which is something that we drive people to get the guest assistants to do today. There's an agent assist that we've added on, where an agent can go to the kiosk and tap a password in and then if there are no seats together on the seat map as you're checking in, the agent has the ability to go in there and potentially take a look.

We have blocked off seats for operational purposes and the agent at the kiosks will be able to just tap in and potentially give you the seat that you want.

J That's handy!

DPS Yeah, so again, another reason why we don't push people to guest assistance. So the intention is to get the applications to be better and better and better, so everything we find that holds people up at the kiosks, we want to make improvements to the application, we control the destiny of that application now with the way that we have redesigned it, um, so we can make those changes as we see fit, and what we've done is we've aligned all of our applications so that they all work in concert, whereas somewhat they were working a little bit independently. So, web, mobile, kiosks, all work very much in line so that if you've done something on the web, the kiosk will know that you've done it, right? It won't ask you the same questions...

J It's all synced?

DPS Right, so and then one of the other big features that is going to help us at the airport is that on our web check-in now, because we have a second bag fee, you'll be able to pay for that second bag fee when you're at home as opposed to having to pay for it when you get to the airport. So, check-in on the web, I know I've got 2 suitcases I'm checking, I've paid my \$20, I can pay for it now, then when I get to the airport, my transaction is that much faster. So, one of our big holdups on transborder today, is we don't have the ability to collect that second bag fee on the kiosk, the kiosk application that we've got today doesn't really support transborder really well and the

ones we will have in place in June, our intention is to go and start self-tagging in the US. We've put it in for approvals, we expect to be doing that before the end of this year, so the lineups that we see at transborder, the efficiencies that we get at domestic, we'll start to realize in transborder in various bases before the end of this year and then again, it's more consistent. I'll self-tag if I check-in domestically, I can self-tag if I check-in transborder.

J So the customers get the same experience...

DPS I know when I get to the airport it just gets easier and easier. And then what we find is, uh, a traditional airport or an airport like Phoenix where we don't have the ability to put in the kiosks and everything else, when people come back from Phoenix they go 'what's this?' 'Why do I have to stand in a big line?', and they like it, so it just makes the domestic product that we have more appealing.

J Well, I think that answers all my questions. Is there anything else you'd like to add before we end?

DPS As long as you're happy.

J Yeah, that was really helpful, that was really good.

DPS I mean a lot of it's, you know, philosophy, a lot of it's, you know, sometimes I like to say we have to tell the guests what they're going to like, right? Because if you ask them all the time, you have to be prepared to be able to deliver on that or start saying no to all the things that they want. So a lot of times, it's just getting them to taste the new product, getting a good way to put it into place, lots of

support so they feel comfortable with it, and let them come around to understanding that OK yeah, this turnaround will be pretty good for me and pretty good for the airline too, so now we're happy right?

J So do you get customer feedback then on how...well I guess you said that you use customer surveys, right?

DPS Yes, we do surveys once a year. We were doing them regularly every time we opened a self-tagging base but now we have so much self-tagging at bases across Canada, it's pretty easy to just push out the survey and we get results once a year. So we still monitor, we still check, we want to see what they're anxious about. The biggest reasons they don't like it is, generally, 'I don't like the fact that you don't serve me from start to finish' but it's a very small percentage, maybe 3%? After that it becomes, you know, 'I'm confused by the tag', 'can you make the tag easier?', and after that, you know, honestly the reasons are very simple in nature and you can tell that it's a smaller group. And out all of those percentages, they would be 1% or less. So, we know the things that we need to be careful with but they're not huge.

J You need to satisfy the majority?

DPS And the majority are saying, the key question for us is, 'would you like to see this in more airports?' and we get a 9 or 10 rating from about 60% of guests.

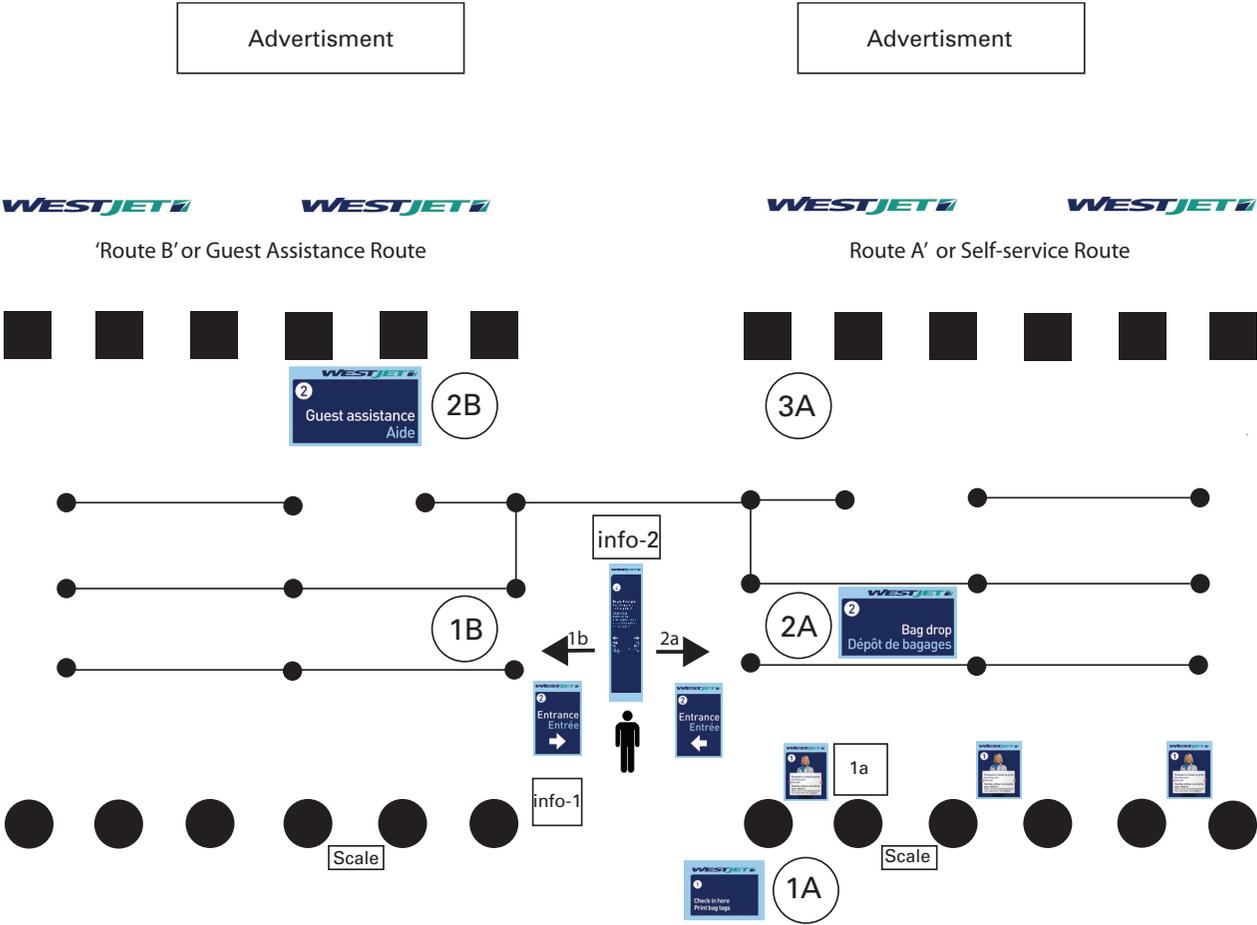
J Wow that's high!

- DPS** That's a pretty high endorsement, right? So then it just becomes 'what size of an airport does this make sense in?'
- J** I mean you do still have the guest assistance route for those customers that do want it.
- DPS** Absolutely, but society is about now, fast, I want the link, I need it to load up right now...
- J** To do it yourself,
- DPS** I'm doing it myself, I'm in control, and what we actually find is, as our demographic changes, the society, folks my age are using iPhones and blackberries, and it's not the same as having somebody who's 70 years old at the airport today who has never owned a phone, right? And they love doing traditional things, so we know that that guest experience is going to change because the elderly that we'll see at the airports in the future, will still have their iPhones and blackberries. And the kids will have something even better but we know that the least basic technology is still enough on the day.
- J** Alright, well thank you very much for meeting with me today. I really appreciate it.
- DPS** Hey, no problem. I hope you got what you wanted?
- J** Yeah I did, I got a lot of good information. That was perfect.

Appendix B

Mapping Service Blueprint

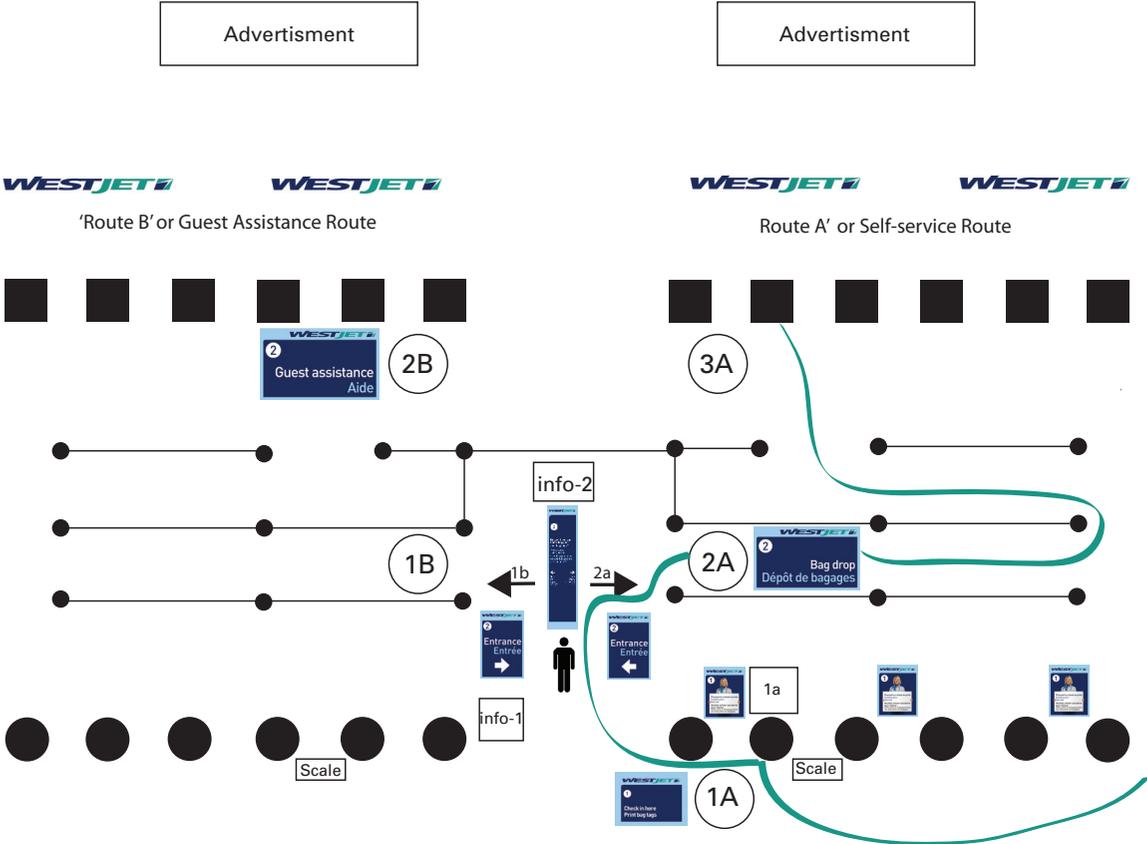
This is a map of each step or point of contact between the customer and WestJet designed into the check-in service. I used the service blueprint as a template for which to trace customers' actual and desired behaviors.



Appendix B-1

Desired Customer Behavior 'Route A' (Service Blueprint)

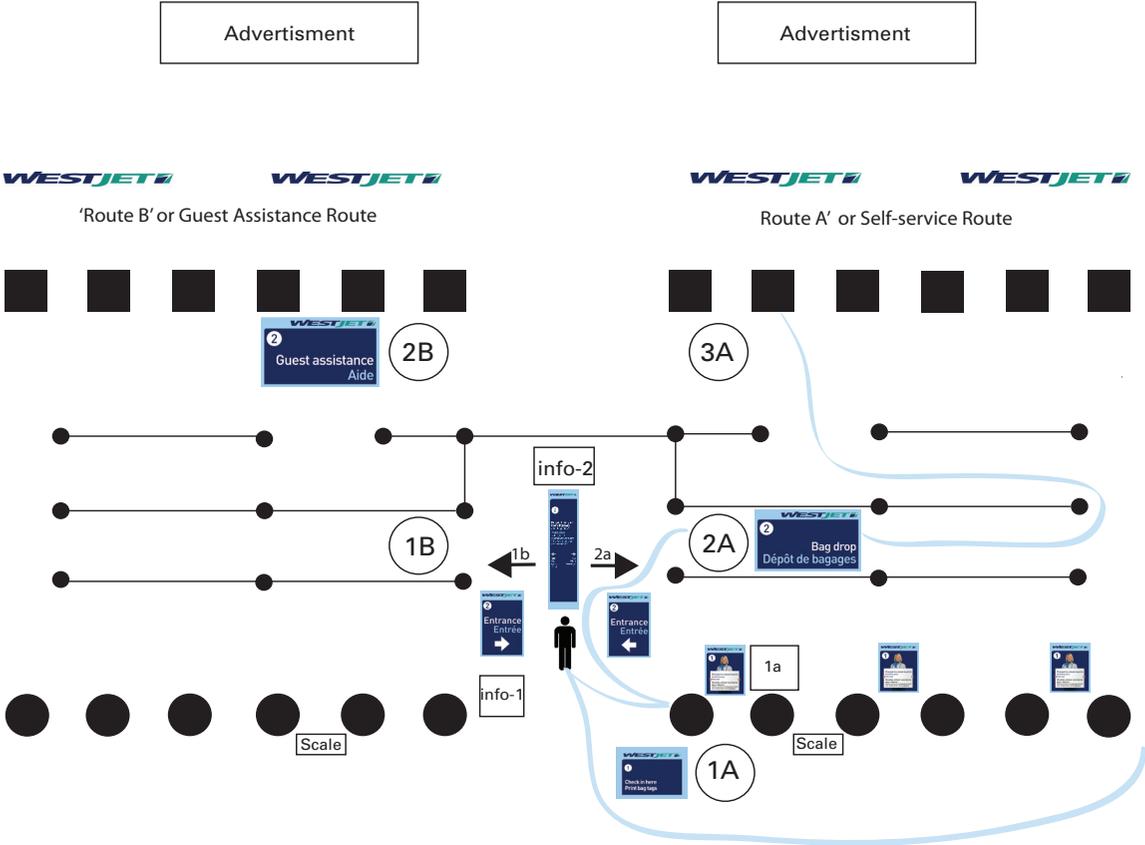
This service blueprint maps out the potential service or the desired customer behaviors at each step in the self-service route or 'Route A' of the service process.



Appendix B-2

Actual Customer Behavior 'Route A' (Cognitive Map)

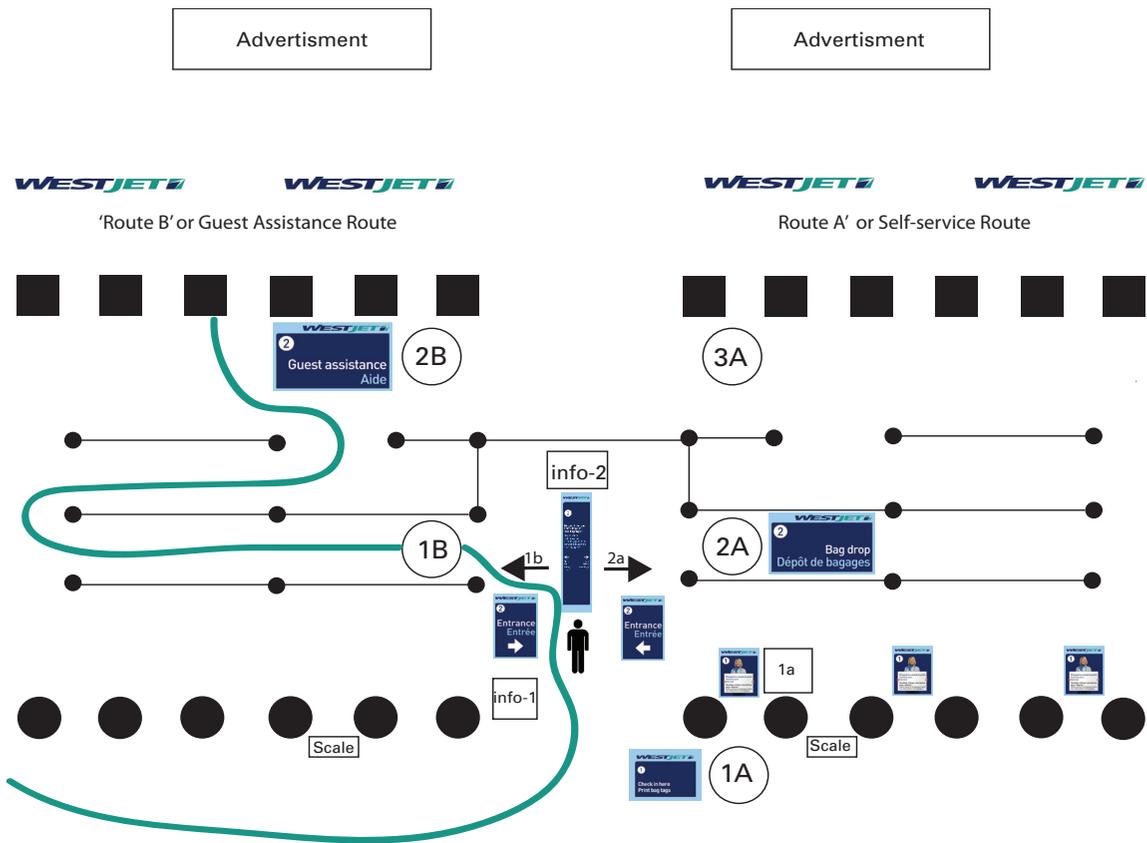
The cognitive map represents the actual customer behaviors at each step in 'Route A' of the service process, which I gathered during my observations of the check-in space.



Appendix B-3

Desired Customer Behavior 'Route B' (Service Blueprint)

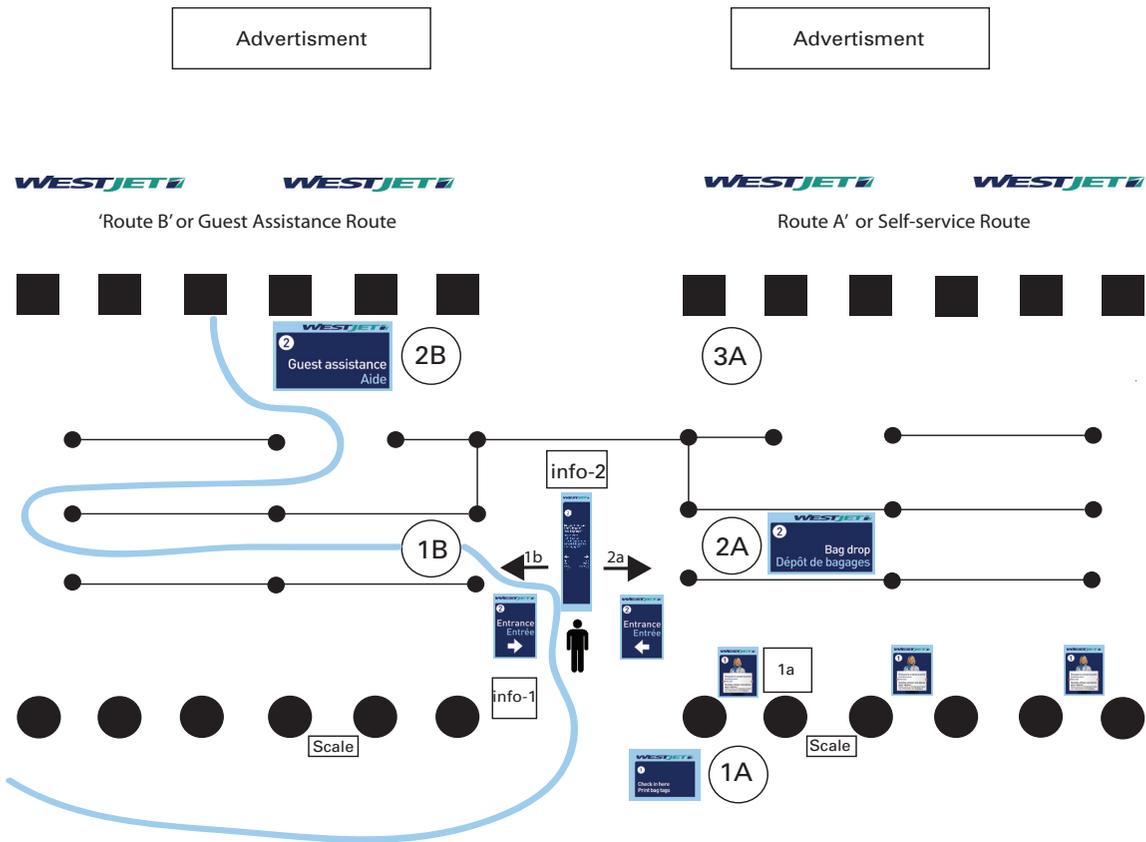
This service blueprint maps out the potential service or the desired customer behaviors at each step in the guest assistance route or 'Route B' of the service process.



Appendix B-4

Actual Customer Behavior 'Route B' (Cognitive Map)

The cognitive map represents the actual customer behaviors at each step in 'Route B' of the service process, which I gathered during my observations of the check-in space.



Appendix C: Time Analysis of Wait Time

'Route A'

Pilot Observation	
Customer 1	1:14
Customer 2	1:35
Customer 3	1:17
Customer 4	1:03
Customer 5	1:07
Average Wait Time	~1:15
Observation #2	
Customer 1	0:13
Customer 2	0:00 (carry-on)
Customer 3	0:00 (carry-on)
Customer 4	2:50
Customer 5	3:42
Average Wait Time	~1:20
Observation #3	
Customer 1	0:09
Customer 2	0:08
Customer 3	0:22
Customer 4	0:32
Customer 5	0:16
Average Wait Time	~0:17
Total Average Wait Time	~0:57

Appendix C: Time Analysis of Wait Time

'Route B'

Pilot Observation	
Route B	Wait Time in Guest Assistance Line
Customer 1	5:47
Customer 2	7:26
Customer 3	7:42
Customer 4	6:49
Customer 5	5:55
Average Wait Time	~6:43
Observation #2	
Customer 1	6:30
Customer 2	7:30
Customer 3	4:45
Customer 4	2:05
Customer 5	2:25
Average Wait Time	~4:38
Observation #3	
Customer 1	1:58
Customer 2	1:24
Customer 3	1:44
Customer 4	4:25
Customer 5	2:34
Average Wait Time	~2:24
Total Average Wait Time	~4:35

Appendix C: Time Analysis of Contact time

'Route A'

Pilot Observation	
Route A	Contact Time at Bag Drop Counter
Customer 1	0:49
Customer 2	0:30
Customer 3	0:46
Customer 4	0:55
Customer 5	0:52
Average Contact Time	~0:46
Observation #2	
Customer 1	1:14
Customer 2	0:00 (carry-on)
Customer 3	0:00 (carry-on)
Customer 4	0:28
Customer 5	1:33
Average Contact Time	~0:39
Observation #3	
Customer 1	0:36
Customer 2	0:10
Customer 3	1:36
Customer 4	0:18
Customer 5	1:06
Average Contact Time	~0:45
Total Average Contact Time	~0:43

Appendix C: Time Analysis of Contact time

'Route B'

Pilot Observation	
Route B	Contact Time at Guest Assistance Counter
Customer 1	1:15
Customer 2	1:10
Customer 3	1:13
Customer 4	1:01
Customer 5	0:55
Average Contact Time	~1:06
Observation #2	
Customer 1	6:00
Customer 2	2:06
Customer 3	1:26
Customer 4	1:15
Customer 5	4:52
Average Contact Time	~3:07
Observation #3	
Customer 1	1:24
Customer 2	3:56
Customer 3	1:46
Customer 4	1:31
Customer 5	4:00
Average Contact Time	~2:31
Total Average Contact Time	~2:15

Appendix C-1: Customer Behavior Patterns

Customer Behavior	# Of Customers	% Of Customers
Customers in 'Route A' no Service	36	29.27%
Customers in 'Route A' Service	35	28.46%
Customers in 'Route B'	52	42.28%
Total Customers	123	100%

Exit

