Preferred Customer Service at U.S. Airways

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The 2004 restructuring of U.S. Airways that allowed it to emerge from a second bankruptcy included a provision allowing the company to temporarily out-source reservation call center operations. However, the company contractually promised the union (Communications Workers of America) that these jobs would be brought back to the U.S. as the financial situation of the airline improved. By 2011, previously off-shored call center operations in Manila, San Salvador, and Mexico City were being brought back to the U.S. and incorporated into the call centers at Tempe, AZ; Winston-Salem, NC; and Reno, NV.

At a regular meeting of all reservation managers at the Winston-Salem call center in late summer 2011, Donna Kostelic, Reservation Director of the East Region, said:

> As you know, the process of repatriating the call center operations, as per the union agreement, is progressing satisfactorily and will be completed by October's end. I believe this is a great opportunity for us to rethink the way we serve our preferred customers. I plan to propose a specialized Preferred Customer Desk to improve both the quality and the speed of service to this small but important customer segment. I think the Winston-Salem center may be the ideal location for this desk.

Donna Kostelic had started her career at the airline in 1979, when it was the Allegheny Airline, as a Reservations and Sales agent while enrolled at Robert Morris University's business program. In 1997 she was appointed to her current position. Her long tenure and dedication to the company and to its success had earned her a high regard among the reservations managers who, well aware of the competitive importance of preferred customers, were mostly enthusiastic and supportive of her idea. They thought specially trained agents would be an efficient way of providing truly superior service to this important customer segment. Customer perception of the quality of service provided by the centers was multidimensional and complex. However, the agents were able to identify several components: a) competence in providing accurate and credible information; b) courteous and polite interaction with the caller; c) communication skills to convey the required information efficiently and c) avoiding unduly long hold times before the call was answered. They thought that several of these dimensions could be improved substantially by agent selection, hiring, and training specifically for the service of the preferred customers.

Kathy Saunders, a champion of the preferred customers, was especially mindful of the impact of wait (hold) times on customer satisfaction. Saunders, a graduate of Appalachian State University, had started as a reservations sales agent in 1981; and after several quick promotions became a reservation director in the Winston-Salem Center. She saw this initiative as an opportunity to improve the average wait time from the company's 45-second target for all customers to a more palatable value, perhaps 30 seconds or even less, for the preferred customers. She remarked that, "Specialized desks are not new to us; we handle lost baggage claims exclusively in the Reno Center because we have agents there who have received specific training for this work. We can leverage this strategy to provide excellent service to our preferred customers with greater speed." The prevailing feeling among the managers was that the idea was sound and worth pursuing. Kostelic knew however, that even though the headquarters had always been keen on improving customer service, approval of such a major initiative would require a strong case based on a thorough cost benefit analysis.

COMPANY HISTORY

Although U.S. Airways was the result of many acquisitions and mergers, its origins could be traced to two regional airlines—Allegheny and Piedmont. Allegheny started in 1939 and after several mergers and acquisitions changed its name to U.S. Air in 1979. Piedmont Aviation was founded in the early 1940s in Winston-Salem, NC by an aviation pioneer, Tom H. Davis. The year 1987 was a watershed year when U.S. Air purchased both Piedmont Airlines and Pacific Southwest Airlines (PSA), creating a major national airline. In 1997 the company once again changed its name to U.S. Airways.

Deregulation of the airline industry in the 1980s, coupled with ever-increasing and unpredictable fuel prices, created a very difficult operating environment for airlines.[1] The 9/11/2001 shut-down of the Washington-Reagan Airport, where U.S. Airways was the largest carrier, crippled the company and forced it to file for bankruptcy in 2002. Thanks to government-guaranteed loans and major cost reduction efforts, U.S. Airways emerged from bankruptcy in 2003 as a leaner and more competitive company. But higher average per-seat-mile costs compared to other airlines forced the company into bankruptcy in 2004 once again. This time the catalyst for emergence from bankruptcy was a merger with America West in 2005.

With the America West merger, U.S. Airways became the fifth largest domestic airline and enjoyed a stronger financial situation (see **Exhibit 1**), except during the 2008 financial crisis when all airlines did poorly. In 2011, U.S. Airways Group (U.S. Airlines and the express companies, such as Piedmont and PSA) employed more than 32,000 aviation professionals, and operated approximately 3,300 flights per day with a fleet of more than 640 aircraft to serve more than 230 communities in the U.S. and abroad.

Exhibit 1: Consolidated Profit and Loss Statements in millions of dollars (2001–2010)

	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
Operating Revenues	$11,908	$10,458	$12,118	$11,700	$11,557	$5,077	$2,748	$2,572	$2,337	$2,296
Operating Expenses	11,127	10,340	13,918	11,167	10,999	5,294	2,768	2,539	2,497	2,714
Operating Income (loss)	781	118	(1,800)	533	558	(217)	(20)	33	(160)	(418)
Income (loss) before cumulative effect of change in accounting principle	502	(205)	(2,215)	423	285	(355)	(89)	57	(180)	(250)
Cumulative effect of accounting change	–	–	–	–	1	202	–	–	208	–
Net Income (Loss)	502	(205)	(2,215)	423	286	(537)	(89)	57	(388)	(250)

(*Source*: U.S. Airways Annual Reports)

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CALL CENTER OPERATIONS

During the last couple of decades the process of booking flights had changed significantly. Company online reservations and third party online services like Travelocity, Expedia, Orbitz, and others, had largely displaced the work of independent travel agents. However, the airlines' own call centers still handled a substantial number of bookings, reservations, and customer questions, with an estimated annual call volume to U.S. Airways call centers upwards of 20 million.

As of July 2011, U.S. Airways operated several reservation centers in two regions, headed by regional reservation directors who reported to the vice president in charge of Reservations and Customer Planning. In addition to the Winston-Salem Center, the East region included centers in Liverpool, UK; Tel Aviv, Israel; and the Manila, Philippines which is soon to be closed.

In the centers, toll-free calls by customers were first processed by Interactive Voice Response (IVR), which interpreted the verbal input from the caller to determine the type of the call (reservation, lost baggage, flight information, etc.) IVR then passed the call to the Intelligent Call Monitoring (ICM) system which, with this information and the system-wide knowledge of disposition of the agents, routed the call to the appropriate center and agent desk.

Recruiting, hiring, and training of the agents were vitally important functions of the Reservation Directors because the quality of service that the callers experienced was a direct function of the quality of the agents. All newly-hired candidates were trained for the basic U.S. and Canada itineraries that made up the majority of the incoming calls, including revenue (paid) and award reservations, booking and servicing. Additionally, agents in specialty departments received training to handle specialized call types such as groups, international itineraries, and others. The centers scheduled and conducted their training programs using experienced agents as instructors based on a standard curriculum developed and maintained by the headquarters.

The administrative structure at the Winston-Salem Center consisted of five Reservations Managers, several other support managers, and supervisors for about 800 full and part-time agents at the center. A supervisor oversaw the work of about thirty agents and reported to one of the Reservation Managers. The effectiveness and efficiency (i.e., quality and cost) of the center's work depended on proper staff scheduling. The objective was to provide an adequate number of agents in a reasonable relationship to the greatly varying call volumes occurring over the course of the day. Staff scheduling was more challenging than it might have first appeared. Agents were unionized employees in whom U.S. Airways had made a considerable investment in training. It was not easy to change the number of available agents to match fluctuating call volumes because the agents could not be hired, trained, and let go with short notice, nor were they eager to work odd numbers of hours, or start at nonstandard times. Furthermore, although the significant call volume changes during the day could be statistically predicted with some degree of accuracy, call volumes were still random phenomena. Therefore, unavoidable and unpredictable deviations from the estimated averages could have significant unfavorable results.

Brandon McHenry, Manager of Reservation Planning and Analysis, and his team at company headquarters were responsible for forecasting expected call volumes. Based on these forecasts and in consultation with reservation directors and the union, his team determined weekly staffing requirements (called bids) using queuing theory. The

bids (see sample in **Exhibit 2**) specified the number of full-time and part-time agents who must begin their shifts at certain times during the day in order to ensure proper coverage of the forecasted call volumes. Centers generally used these templates to make their own staffing decisions by making daily adjustments if the actual call volume patterns appeared to differ markedly from the forecasted patterns. Centers then published the schedules; and individual agents bid for each of the scheduled shifts. The final assignment of the scheduled shifts to the specific agents was based on these bids; conflicts were resolved by seniority.

Exhibit 2: A sample of a partial bid. Each line represents a shift for which agents bid to finalize the schedule.

INT FT   **Bid 11-03**

SHIFT TYPE	ID	START	STOP	PBRK1	UBRK2	PBRK3	M	T	W	R	F	Y	S
5x8	11	05:00	13:30	06:30	08:30	11:15	M	T	W	R	–	–	S
5x8	12	05:00	13:30	06:30	08:30	11:15	M	T	W	R	F	–	–
5x8	13	05:00	13:30	06:45	08:30	10:30	M	–	–	R	F	Y	S
5x8	14	05:00	13:30	06:45	08:30	11:30	M	T	W	R	F	–	–
5x8	15	05:00	13:30	07:30	09:30	11:45	M	T	W	R	F	–	–
5x8	16	05:00	13:30	06:45	08:30	11:30	–	T	W	R	F	Y	–
5x8	17	05:00	13:30	07:30	09:30	11:30	M	T	W	R	–	–	S
5x8	18	05:00	13:30	07:00	08:45	11:45	M	T	W	R	F	–	–
5x8	19	05:30	14:00	07:45	09:30	12:00	M	T	W	–	–	Y	S
5x8	20	05:30	14:00	07:15	09:00	12:15	–	–	W	R	F	Y	S
5x8	21	05:30	14:00	07:15	09:00	12:15	M	T	W	R	F	–	–
5x8	22	06:00	14:30	07:30	10:30	12:30	M	T	–	–	F	Y	S
5x8	23	06:00	14:30	07:45	09:30	12:45	M	T	–	–	F	Y	S
5x8	24	06:00	14:30	07:45	09:45	12:30	M	T	W	R	F	–	–
5x8	25	06:30	15:00	08:15	11:00	13:15	–	–	W	R	F	Y	S
5x8	26	06:30	15:00	08:00	10:00	12:00	–	–	W	R	F	Y	S
5x8	27	06:30	15:00	08:15	10:15	13:15	M	T	–	–	F	Y	S
5x8	28	06:30	15:00	08:00	10:00	13:00	M	T	W	–	–	Y	S
5x8	29	06:30	15:00	08:00	10:15	13:00	M	T	W	R	F	–	–
5x8	30	06:30	15:00	08:00	10:00	13:00	M	T	W	R	F	–	–
5x8	31	06:30	15:00	08:15	11:15	13:15	M	T	W	R	F	–	–
5x8	32	07:00	15:30	08:45	11:45	13:45	M	T	W	–	–	Y	S
5x8	33	07:00	15:30	08:30	11:15	13:15	M	T	W	–	–	Y	S
5x8	34	07:00	15:30	08:45	11:45	13:45	M	T	–	–	F	Y	S
5x8	35	07:00	15:30	08:45	10:30	13:30	–	–	W	R	F	Y	S
5x8	36	07:00	15:30	08:30	10:45	13:30	M	T	W	–	–	Y	S

(*Source*: Company records)

Key to abbreviations:
PBRK1 = Paid Break 1   M T W R F Y S = days of week (Monday through Sunday)
UBRK2 = Unpaid Break 2   INT = Airline's code for the Winston-Salem Center
PBRK3 = Paid Break 3   FT = Full-time

A few days after the managers' meeting in which Kostelic introduced the idea of a Preferred Customer Desk, she was having a discussion with Kathy Saunders in her office when her assistant brought the bids that had just arrived from headquarters. Carefully examining the bids, she told Saunders, "I know these bids are based on their best estimates of the call volumes, reflect the company's service aspirations, and are the result of solid analysis. But sometimes I wonder if we all fully grasp how important these schedules are for the company's bottom line, for the agents, and for the customers, especially when the scope and volume of our activity at the center is increasing due to the ongoing repatriation process."

From the perspective of the agents, the repetitive and monotonous nature of their work could lead to mental fatigue and job stress[2]. Insufficient staffing could not only result in unacceptably long wait times, but might also escalate the agents' stress levels and irritability, resulting in lower job satisfaction and possibly being less cordial and helpful to the customers. The agreement with the union provided every agent during his or her shift with two 15-minute paid breaks and one half-hour unpaid break (See Exhibit 2), intended to alleviate the high stress nature of this work. Kostelic explained the fundamental trade-off due to the random arrival pattern of calls. "It is not generally possible for us to achieve 100 percent agent utilization or completely eliminate waiting (hold) times. Using fewer agents to improve utilization will lengthen customer hold times and contribute to increased stress for the agents, thus causing callers to feel rushed and adversely affecting perceived quality of the service. So, deciding on the appropriate number of agents and their shifts is not an easy task." Kostelic believed the negative consequence of this effect on the more loyal preferred customers could be even more serious. The vital role that perceived customer service quality played was well-understood by the industry. There were, indeed, a variety of agencies, ranging from airline specific internet sites such as Skytrax and Webflyer, to publications such as the *New York Times* and *U.S. News* that continuously rated carriers on a variety of metrics of which perceived customer service was an important one.

The company had long experienced significant issues with its image. In 2007 *Consumer Reports* ranked U.S. Airways as the worst airline for customer satisfaction. Also in 2007, the *Today/Zagat Airline* survey[3] ranked it poorly on comfort, food, service, and its online reservation system. However, after correcting merger-related problems, in 2008 U.S. Airways reached the top of the rankings among the major airlines in the important on-time arrival and departure metrics. Still, in recent reports, U.S. Airways' customer satisfaction received mixed reviews. In April 2011, it earned the top spot in the 2011 Airline Quality Rating (AQR) report among "Big-Five" hub-and-spoke carriers, but in a May 2011 *Consumer Reports* survey, it scored last for overall customer satisfaction among the ten largest domestic airlines.[4]

Preferred Customer Program

Increased competition after deregulation also fueled efforts by the airlines to establish a loyal customer base by offering a variety of frequent flyer programs. The first such program was offered by Texas International Airlines in 1979. Other airlines quickly copied the idea, including U.S. Air in 1984. Starting as relatively simple programs to reward loyal customers with free tickets, the programs became more complex over time with many rules and formulas to earn free trips and to qualify for other assorted

benefits. U.S. Airways' Dividend Miles Preferred Customer Program offered four levels of membership: Silver, Gold, Platinum, and Chairman's Preferred. Each tier was attained by accumulating specified levels of miles and/or flight segments and entitled customers to progressively higher levels of privileges including upgrades, free checked bags, choice seats, priority security lines, check-in and boarding, "Star Alliance" benefits, priority stand-by, and club membership.

Exhibits **3a** and **3b** illustrate the detail and complexity of rules that governed the manner of redeeming earned frequent flyer miles to qualify for a variety of awards and benefits. The availability of free travel dates and destinations not only depended on the membership class but also on "capacity constraints" and "black-out

Exhibit 3a: U.S. Airways GOAwards Travel Chart

Round trip destinations	Cabin	Off-peak	Low	Medium	High
Within and between the continental U.S. (including AK) and Canada	Coach First	N/A	25,000 50,000	40,000 80,000	60,000 100,000
Between the continental U.S. or Canada and the Caribbean	Coach First	25,000 50,000	35,000 60,000	60,000 100,000	80,000 140,000
Between the continental U.S. or Canada and Mexico or Central America	Coach First	N/A	35,000 60,000	60,000 100,000	80,000 140,000
Between North America and Hawaii	Coach First	N/A	40,000 70,000	65,000 135,000	90,000 180,000
Between North America or Hawaii and South America	Coach Business	35,000 60,000	60,000 100,000	90,000 200,000	125,000 350,000
Between North America or Hawaii and Europe	Coach Business	35,000 60,000	60,000 100,000	90,000 200,000	125,000 350,000
Between North America or Hawaii and the Middle East	Coach Business	N/A	80,000 120,000	120,000 180,000	160,000 240,000

(*Source*: http://www.usairways.com)

Note: "Off-Peak," "Low," "Medium" and "High" refer to travel seasons

Exhibit 3b: U.S. Airways Off-Peak Award Travel Chart

Round-trip destinations	Off-peak eligibility dates	Coach	First Class or Business Class
Within and between the continental U.S. (including AK) or Canada and the Caribbean	September 1–30	25,000	50,000
Between North America or Hawaii and South America	2011 May 1–31 & October 1–31 2012 March 1–31 & May 1–31	35,000	60,000
Between North America or Hawaii and Europe	January 15–February 28	35,000	60,000

(*Source*: http://www.usairways.com)

dates," further complicating the qualifying process. The process of earning and redeeming miles had become so complex that websites emerged to compare and rate the quality of these programs by major airlines. **Exhibit 4** shows two ratings of U.S. Airways' Dividend Miles Program as of April 2010[5]. Despite the somewhat favorable

ratings by Webflyer, the customers' perceptions of program attributes appeared considerably lower. Several reservation managers suggested that the perception of inadequate customer service during member phone calls and excessive hold times as possible explanations for the low customer ratings.

Exhibit 4: Rating of U.S. Airways Dividend Miles Program by Webflyer in April 2010

	Overall Rating	Earning Ability	Award Choice	Partnership	Elite-Level	Rules and Conditions	Service Support	Online Services
Webflyer	7.71	8.00	7.50	8.50	7.50	8.00	7.00	7.50
Customers	4.68	4.95	4.58	4.71	4.87	4.33	4.71	4.60

(*Source*: http://webflyer.com)

Note: Both ratings by Webflyer and by 730 customers are out of a possible 10 points.

Kostelic had been wondering, "We know it's vital that agents serve our customers satisfactorily . . . and quickly! But, are they knowledgeable enough to do both? The rules about the membership levels are pretty complicated . . . so the agents may need more specific training." She doubted that answering preferred customer calls together with all other calls was an effective strategy. Instead she believed the best way to provide truly superior service to the preferred customers was to concentrate all preferred customer services at a special Preferred Customer Desk. She explained this view to the reservation managers and added, "The Winston-Salem Call Center can distinguish itself in the service of the preferred customers as it is our largest call center in the Eastern Region and has very loyal, capable, and well-trained agents." Separating the preferred customer calls would require providing additional training to an adequate number of agents in the complex award rules. With specialized training and experience, these agents would become more proficient, knowledgeable, and effective in providing excellent service to this small but loyal group of customers. Kostelic suggested preferred status should qualify customers for preferential treatment. Although she knew that shorter hold times and faster handle times might not solve all perceived customer service problems, it seemed like a good place to start.

PREPARING A PROPOSAL FOR A PREFERRED CUSTOMER SERVICE DESK

McHenry's staff scheduling based on all call volumes assumed an average hold time of 45 seconds. Adopting a higher standard, e.g., a 30-second wait time for the preferred customers, might entail scheduling more agents which could negatively influence overall utilization and increase personnel costs. Even with a standard hold time of 45 seconds, Kostelic was mindful of a considerable proportion of the preferred customers actually having to wait two minutes or more. Furthermore, she wondered how scheduling agents with a 30-second target average hold time for the preferred customers would impact a variety of competitive and cost metrics such as preferred customer satisfaction, agent utilization, and training and payroll costs. Kostelic asked Kathy Saunders (whom she considered a possible candidate to manage the Preferred Customer Desk if it came to fruition), to help her prepare a detailed analysis.

Kostelic and Saunders met to outline a compelling case to the headquarters on the benefits of serving preferred customer calls separately from other mostly basic calls (domestic itineraries). They agreed that strong arguments could be made for a specialized Preferred Customer Desk based on training economies, better quality service, and faster handle times. They also felt that shorter average hold times for this important customer group could be justified unless it was prohibitively expensive. Since preferred customers represented the "flagship" segment, they felt that the best agents should be selected and trained in order to enhance the quality of service to these customers.

Furthermore, they wanted to deviate from the strict pattern of existing shift schedules with a half-hour unpaid break and two 15-minute paid breaks per the union contract. Kostelic reasoned that these "elite" agents might prefer a measure of freedom in structuring their own shifts rather than being dictated a rigid break schedule. She suggested to Saunders that they consider for these agents eight-hour shifts consisting of four hours on, one hour off, and four hours on (4-1-4). She explained that while some agents might enjoy a full hour uninterrupted break, others would be free to trade part of their one hour scheduled break with another agent in order to distribute their scheduled breaks as they wished over the course of their shifts. She explained to Saunders, "Consider for instance two agents: agent A's scheduled shift starts at 10 a.m. with a scheduled one hour break from 2–3 p.m.; agent B's scheduled shift starts at 8 a.m. with a scheduled break from 12 to 1 p.m. If they wished, these agents could trade part of their scheduled breaks. Agent B could delay his break till 12:15 p.m. to let agent A take a 15-minute break at noon. In exchange, agent A could delay his break until 2:15 p.m. to let agent B take a 15-minute break at 2 p.m." She believed this option would give the agents a sense of autonomy and control over their rather demanding work day. Kostelic knew this new arrangement would have to be approved by the union but believed that it was in the general spirit of the prevailing collective bargaining agreement—the agents would still be paid for 8.5 hours, including a half-hour of paid and a half hour of unpaid breaks, regardless of when they took the breaks.

To evaluate the trade-offs between the agent utilization metric (a proxy for costs) and customer hold times (an element of service quality), Saunders needed data on average personnel costs, the pattern of preferred customer calls, and call lengths (handle times). Although the average hourly wage rate for the agents in Winston-Salem was \$12/hour plus roughly 25 percent for benefits, Kostelic told Saunders, "For planning purposes, we better use a figure of \$14/hour since we want to use the best and most experienced agents for the preferred customer desk." Saunders obtained detailed data on preferred customer call volumes and handle times from McHenry's office. The raw service times data she started with consisted of the average handle times of preferred customer calls that occurred in each of the 1440 half-hour periods during a 30-day period. She created a frequency distribution of the average handle times (see **Exhibit 5**).

Exhibit 5: Distribution of Average Handle Times in Seconds

From	To	Frequency		From	To	Frequency
0	25	1		500.01	525	51
25.01	50	1		525.01	550	20
50.01	75	6		550.01	575	14
75.01	100	10		575.01	600	14
100.01	125	11		600.01	625	15
125.01	150	13		625.01	650	11
150.01	175	14		650.01	675	10
175.01	200	27		675.01	700	5
200.01	225	34		700.01	725	14
225.01	250	43		725.01	750	2
250.01	275	61		750.01	775	2
275.01	300	86		775.01	800	2
300.01	325	127		800.01	825	3
325.01	350	130		825.01	850	1
350.01	375	166		850.01	875	0
375.01	400	161		875.01	900	4
400.01	425	122		900.01	925	1
425.01	450	99		925.01	950	2
450.01	475	79		950.01	975	2
475.01	500	54		975.01	1000	0
				1000.01	More	13

(*Source*: U.S. Airways, Reservation Planning and Analysis Section)

Note: In nine of the 1440 half hour periods observed there were no calls coming in.

Data from McHenry also included preferred customer call volumes for a typical week in hourly periods as shown in **Exhibit 6**.

Exhibit 6: Distribution of Average Preferred Customer Call Volumes

Hour	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
0:00	7.3	7.3	8.5	7.2	8.2	14.3	7.8
1:00	9.8	18.3	11.5	10.8	10.0	12.3	9.6
2:00	14.8	26.5	17.5	27.4	21.4	28.0	12.0
3:00	20.5	46.5	31.5	40.8	32.6	45.5	24.0
4:00	42.0	68.8	58.0	78.8	65.8	78.0	47.0
5:00	76.8	115.0	91.8	102.4	107.6	110.5	66.0
6:00	66.8	154.5	125.5	121.8	128.0	161.3	89.8
7:00	85.3	148.0	133.3	138.4	152.8	163.3	96.0
8:00	129.0	146.5	134.8	134.4	159.4	171.3	103.0
9:00	117.3	141.5	122.0	119.2	151.8	150.0	97.5
10:00	109.5	131.3	127.0	121.8	143.2	168.0	91.3
11:00	119.3	134.5	129.8	130.0	151.0	167.8	88.8
12:00	117.3	127.8	121.5	139.0	150.4	154.3	87.3
13:00	111.8	123.8	127.3	145.0	151.6	167.8	79.5
14:00	119.0	130.8	108.8	139.6	157.8	148.0	69.3
15:00	106.0	85.0	95.8	110.6	139.8	122.8	67.8
16:00	133.8	85.0	79.5	90.4	150.2	95.5	56.3
17:00	112.5	67.3	84.8	79.6	122.8	81.3	51.0
18:00	82.8	81.0	94.8	76.2	102.8	63.8	55.0
19:00	60.3	59.3	84.0	66.6	82.6	58.8	46.0
20:00	48.0	40.3	45.5	46.6	56.6	42.3	35.8
21:00	33.8	30.3	29.8	33.2	32.0	27.0	20.5
22:00	18.5	20.0	18.3	17.2	24.2	17.0	23.3
23:00	8.0	9.0	6.3	10.4	15.2	9.5	11.8

(*Source*: U.S. Airways, Reservation Planning and Analysis Section)

For the Preferred Customer Desk proposal, Kostelic also wanted to explore whether the use of part-time agents (four-hour shifts) would be advisable. She reminded Saunders to include the use of part-time agents in her analysis. She said, "I understand that training the part-time agents might not be as cost-efficient as full-time agents, but their limited use might result in more efficient schedules resulting in a closer fit between the number of agents the schedule provides and the number actually needed." These agents would work four contiguous hours and be paid for 4.25 hours in keeping with the wage policy of the company.

Looking at the data (in Exhibit 6) with a view to exploring the above proposals, Kostelic and Saunders were somewhat discouraged. It appeared that call volumes showed significant differences from one day of the week to another. Did that mean they needed to schedule the proposed Preferred Customer Desk for a whole week? If so, they reasoned they needed to schedule 168 scheduling periods (24 hours x seven days). Or could they simply explore the economic effects of the proposed Preferred Customer Desk? In that case, the required analysis could, as a short-cut, be based on the average call volumes expected during a typical day of the week with the understanding that the actual timing of the 5-day shifts could be staggered in a way to accommodate the changing call volumes.

Kostelic was quite confident that she could make a compelling argument that (1) specialized training would result in a markedly more satisfactory service for the preferred customers, favorably influencing the company's competitiveness; and (2) there would be significant economies in more specialized agent training. She however knew that the headquarters would also expect the proposal to include an in-depth cost/benefit analysis—particularly on the trade-off between personnel costs and customer hold times.

NOTES

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