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I started my internship at Delta Air Lines with the Schedule Planning group at the Network Planning Department in May of 2010. An internship with Delta was a dream come true and I was excited to be able to be a part of a company that is moving the industry forward with initiatives and innovation.

I had started to think about doing an internship and when I came back from the summer-break my junior year, my goal was to try to do an internship for the upcoming summer. There were many reasons behind my decision for wanting to pursue an internship. In previous years, I had always felt as if I was not ready to take the step into the corporate world, but after three years at Embry-Riddle, I knew that I was ready for an internship. My goal was to get an internship at one of the large airlines, even though I knew that the industry is very competitive and jobs are few. I was applying for internships at the Eagle Hire Network during the spring semester, and one of them was for a schedule planning position at Delta Air Lines. I scheduled for an interview with them and when the day came and I walked out from there I knew that I had prepared myself the right way and now it was up the Delta hiring manager to figure out if they thought that I was the right candidate for the internship. Two weeks after the interview, Delta Air Lines Schedule Planning Manager called me and offered me the position as an intern in their group for the summer 2010.

Looking back at my first day with Delta, I realize that I was nervous, but most of all excited and eager to start working. I knew that this was a once in a life time opportunity that I wanted to take advantage off. The first days at Delta were filled with introductions, and meet and greet with the department managers and other employees. We were three interns in total that worked at the Network Department, but all of us were working in different groups and projects within the department. I realized during these first weeks that I had an advantage over the other interns when it came to knowledge about the aviation industry. When co-workers were talking about load-factor, I knew that they were referring to how many percentages of the aircraft that were filled with revenue passengers. Or, when they talked about block time, they described the time from when the aircraft leaves the gate at point A (they remove the block from the wheels) to when it is back to at the gate at point B. Knowing the terminology of the industry helped me a lot, especially during the first couple of weeks when we were in the introductory stage. I could much faster get to the work-specific training instead of spending time understanding how the industry worked.

My work duties would come to alter much from week to week, which gave me a greater understanding of the department as a whole. I was working with so many different areas of the department; so I always had to be prepared to be open-minded and not get stuck in one way of thinking. Schedule planning is much like a big puzzle; it is about finding the right pieces, and combining them to so that they will be able to function together. The difference between a puzzle in the real life and a puzzle in schedule planning is that a real life puzzle only has one correct match; schedule planning on the other hand, had many different combinations that would all work together. What we as Schedule Planners had to think about was which combination would be the most beneficial to the company and our customers. There are so many different factors that you have to think about when you lay a schedule.

Schedulers got analysis from the planners, whose responsibility is to analyze if Delta needs to bring in more capacity to a market, or if we should pull back capacity. This is a process that they needed to update all the time, sometimes it would change between months, but it could also change between different days of the week. In business markets, we would have extensive capacity especially in the mornings or in the late afternoon, but we would down gauge (have smaller aircrafts) during the day since demand was lower. Or on the other hand, we would have leisure markets such as Key West, where we would go from low capacity during the year, to increasing our capacity heavily around Spring Break. The planner would give us this analysis and it would be up to the schedule planners to figure out when and how we would increase capacity in the specific market. We might say that a second morning flight would work best, however we would not be able to fund (find aircraft time) a second morning flight. Instead we might add an afternoon flight that we knew will not do as good as the morning flight, but that is when we have aircraft time. If we would add a morning flight, we would need to cancel another morning flight, or bring back another aircraft. The second alternative is for the most part impossible, but there might be situations where an aircraft would be in maintenance that is not necessary to complete at that time and we could bring it back to operations earlier. The first alternative where we would cancel a flight is the most common solution; however it is important to make sure that we are not cancelling something that could bring higher revenue or greater benefits to our network.

Delta Air Lines has, like most other airlines these days, a hub and spoke network that adds greater connectivity and brings more options to customers. Customers often fly from a spoke (outstation) in a smaller aircraft to a hub were they have a connection to international destination in a larger aircraft. This allows customers from point A get to point C through the hub airport that we call point B. Another passenger on the plane from point A will also go through point B, but instead of connection to point C they will make another connection and go to point D. Instead of having nonstop flights, airlines can combine passengers at the hubs, which give passengers more connection possibilities at the same time as it saves money for the airline. As most people know, Delta has a hub in Atlanta (ATL), but we also have hubs in Detroit (DTW), Minneapolis (MSP), Memphis (MEM), Salt Lake City (SLC) ,New York (La Guardia, LGA), Cincinnati (CVG), Paris, France (Charles de Gaulle CDG), Narita, Japan (NRT) and Amsterdam, Holland (AMS).

The hub and spoke network are made possible with bank structures, which means that aircraft from the south need to arrive before a specific time so that they have enough connection time before they would connect to the north. If they do not come in before a specific time, passengers would not be able to make their connection and they would need to wait to the next “north bank” that would occur later during the day. As schedulers, we often run in to situations were we knew that a flight from one of our hubs (MSP) to another hub (MEM) would not be able to make both banks. It was then up to us to make the decision which bank was more important to us, and in most case we would favor the bigger hub. In the case of ATL, were we often have multiple connection possibilities, we would rather make the bank at the smaller hub, especially since they are in a more vulnerable financial situation.

For little over a week during my internship, I was working with the General Manager of Network Planning over the East of United States, in a project on domestic claims for the marketing department. I used a database called APG, Air Promotion Group, that store information about the airlines. In APG, I was able to extract information about airlines in regards to; number of flights flown for a specific time period, seats, ASM, RASM, CASM, city pairs and much more. My project involved measures where Delta could make claims on the domestic market. The first thing I had to do was to get used to working in a database, I only had little experience in regards to it before I started my internship. I also had to decide how I wanted to gather the information and how I wanted to present it. I started gathering information in one format, but I realized fairly soon that this would be difficult and time consuming. The question then becomes, will you throw away a days’ work or should you continue the same way for the rest of the project. I rather work extra at night to compensate for the work I had to throw away, then submitting information that could be presented much better.

The most obvious claim that I was able to reinforce, that is already known to the public, is that Delta Air Lines is the worlds’ largest airline and they serve 160 million customers to 350 destinations in 70 countries. Delta is not only the largest airline in the world; they use Atlanta Hartsfield Jackson International Airport, the busiest airport in the world (passengers carried), as their main hub and most important gateway to their network. I found through my research that Delta serves more airports and states, within the United States of America, than any other airline. These were all claims that made me proud to intern for Delta Air Lines, since I know that it brings value to customers around the globe. Delta is able, with their comprehensive network, to connect people from east to west, north to south, but most importantly across cultures and barriers. Delta currently added, or are about to add during fall of 2010, three African markets, today we serve Abuja in Nigeria (ABV), Accra in Ghana (ACC), and Monrovia in Liberia (via Accra, Ghana) (ROB) in addition to previous Cairo, Cape Town, Johannesburg and Lagos . I believe that taking the lead like Delta has done on the African market shows the intent of becoming a truly global airline that serves a diverse group of passengers.

It is always inspiring to do work for upper management since you know that this is your time to shine and show that you are qualified in what you do and that you perform good work in a timely manner. What I realized is that upper management at these companies are the best of the best, and when you do work for them you need to have everything very neatly organized so that you will save their time. If they say that the meeting is 15 min, they really mean that you have 15 min to present your findings.

When I did my internship at Delta Air Lines there was one specific skill that I had posses and it was Microsoft Excel skills. Most tasks that I had to perform were presented in Excel, and if I could find a way to be more efficient in it, it allowed me to be more efficient in my work. Other classes that I have been taking at Embry Riddle, such as BA 315 Airline Management and EC 315 Managerial Economics, have helped shape a way of critically examine the airline industry and its operations. Knowledge about the hub and spoke system, revenue management, and pricing helped me perform a better job at Delta.

Having an internship with Delta Air Lines is one of the best experiences in my life. The knowledge and skills that I got from the internship will not only help me in the future when I look for a job, it will also help me during my last semester as a student at Embry-Riddle Aeronautical University.