Section 5 Guest Lecture
Location and Supply Chain Management
Guest: Dr. Larry Crosby

Hi, this is Linda Peters of Esri. I would like to welcome today Mr. Lawrence Crosby. Mr. Crosby is the dean of Claremont Graduate University's Peter Drucker Graduate School of Management.

Lawrence: Linda, it's great to be with you today, working with Esri, an organization that I highly admire.

Linda: Well, thanks. Mr. Crosby, as dean of the Drucker School, can you tell us, from your perspective, why it's essential for a business person to understand the importance of location analytics?

Lawrence: Sure, Linda. I get pretty excited about locational analytics. When you think about it, you know, really, most everything about business exists or will exist at a particular time and location. You know, it could be objects like raw materials, products, facilities; it could be people like employees, agents, customers; or events like deliveries, purchases, production runs. And if you can understand how these elements relate to one another through locational analytics, that can inform decision making in a manner that can improve both efficiency and effectiveness. To give you a couple of perhaps what are the most common examples today include understanding and targeting customers, understanding and optimizing business processes, and siting facilities and assets, but there are thousands of other potential applications, Linda.

Linda: That's interesting, and I know you've done a lot of work in customer relationship and loyalty management. Can you tell us a little bit…

Lawrence: You bet.

Linda: …about you seeing location impacting that area of business?

Lawrence: Sure, sure. Well, building customer relationships and loyalty is very much about customizing products and services and communications to segments, and increasingly, to individuals. And that's facilitated today by the Internet of Everything, big data, including locational analytics and mobile technology. So let me give you an example. Today's customer expects "know me, know who I am, what I need and like, how I'm unique," and locational analytics can help us fine-tune the level of detail by combining data about buying patterns, psycho-demographics, even sentiment analysis all link together by latitude and longitude. And with that, you can make targeting decisions at the group or individual level with a very clear picture of who the customer is.

Linda: We certainly see that, as well. I think the students this week are learning about supply chain, and I'd be interested in your perspective on the significance of spatial analysis to supply chain, as well.

Lawrence: You bet. Well, spatial analysis (as you point out, Linda) it's critically important to supply chain, which is really about meeting or exceeding customer expectations while managing cost and mitigating risk. Locational analytics is heavily used. Probably the most well-known applications are around the optimum siting of facilities and assets. For example, transfer facilities, warehouses and distribution centers, inventory, where you put your trucks and planes and railcars, and right on down to retail locations. Some good examples that we see every day involve routing or rerouting in real time in response to traffic patterns, for example.

Linda: So what's the business benefit of using GIS and location analytics in those scenarios?

Lawrence: Well, the business benefit is really—comes down to, I think, what all businesses try to do, and that's to manage and maximize their effectiveness and efficiency, both of those things simultaneously. And effectiveness is really—Linda, about, as you know, achieving your goals and objectives…nailing those. Efficiency is about

minimizing resources, especially when those resources are limited. And locational analytics and GIS, I think, can help do both, whether it's to serve customers better, to meet their expectations, to deliver on what you promised because you know who they are, where they are, but also to do that efficiently in a way that minimizes the resources. Then the other part of that, Linda, I would throw out is risk management, and some of risk is locational. So you add that element in, whether it's traffic and weather patterns or a conflict or strikes or shortages, it gives you also an opportunity to manage the risk factor.

Linda: Well, that's great Larry. I really want to thank you. It's great to hear your perspective.