Section 1 Lecture

Business Geography and The Location Advantage

Lecturer: Lauren Bennett

Why is location so important when it comes to making more informed business decisions? How can it help you gain the insight you need to get ahead? I'm Lauren Bennett from Esri's software development team, and today we're going to discuss how location intelligence can give you and your business a competitive edge.

Many businesses already collect a wealth of data. Whether big data or small, most data includes locations. Throughout this course, we'll explore and learn how to make use of this location information; how to question, model, analyze, and interpret business data to make more informed decisions.

If you're a business school student or graduate, you know a lot about business. But what about geography? Geography is the study of where things are on the earth and why they're there. Now, how is geography related to business? Geography is important to almost all areas of business, as illustrated here. For example, what if you were a business analyst assigned to recommend a new site location for a distribution center? This could be a company that ships multiple products, or a beverage company, or a consumer packaged goods company. When a company like this is looking to expand into a new region, there are many geographic questions to answer.

For instance, in relation to finance: What's the cost of a project based on regional conditions? Would this location be more or less costly in the long run? What are the local tax and wage rates? What are insurance costs?

In real estate, you need to understand: Where do I put my distribution center? What's the viability of the real estate site, or location, being proposed for development? What are the costs based on that location?

For supply chain management, you'll need to know: How many customers can I reach within a certain distance? 50 or 100 miles? What's the risk in the supply chain due to the location of the supplier? What about my supplier's supplier? And what if there's an interruption?

If you're into risk assessment, you'll ask questions like: What's the risk of failure due to local economic market conditions? What's the risk of interruption in business due to natural disasters or civil unrest or crime? What cost burden would be added from contingency planning needed at this location?

Marketing questions include: Where are my customers? Who are my customers, and where do they live? How do I best reach my customer? What media do I use to reach them with my advertising message?

An HR person will ask: Where do my employees live? What are the best potential employees with certain skills needed, and where do they live? What's the local educational attainment level? How will relocating my business impact my current work force? And will it be difficult for my employees to reach a proposed location by, let's say, 9 a.m.? Do I need to offer flex hours?

Well, geography is relevant to accounting because accounting reflects the ways in which various economic forces interact. For example, what are tax implications for workers in a certain location? What are the local tax laws? What impact might be felt on payroll or health care costs due to a move?

Management needs to know: What is the sales performance by region, or by product, or by manager? How well is my marketing campaign doing by region? What location makes the most sense for both customers and suppliers? Well, these are decisions that are related to capex, or capital expenditures.

Ops and administration questions include: How do I assign workers to a project by territory to be most cost-effective? What will it cost to get Internet or telecommunications connectivity in a certain location? What's the transportation network or traffic pattern?

And last but not least, there's international business. The stakes are high when opening or expanding a business in other countries. What's the condition of the economy there? Are the government and the local consumers receptive to your business? What's the market size, intensity, and growth rate? What's the permitting process? How do you register property? How difficult is it to enforce contracts or resolve disputes?

Next, let's consider the location advantage. What do we mean by this? By using location information, businesses can better understand market conditions, customer preferences, competition, risk, pricing, labor market conditions, and much more. They can derive advantages over their competitors, and directly increase revenues or decrease costs. Location information is already being captured by companies, big and small. Every business, from the biggest global corporation down to your local neighborhood coffee shop, needs to leverage every aspect of the information they have to generate an advantage, and that includes location.

Now, before going further, there are some general terms that we'll need to use throughout this course that are important to differentiate so that we're all on the same page. Some years ago, geospatial technology was identified as one of the fastest-growing technologies. Specialists in this field refer to geospatial data, which shows objects or areas on the earth and where they are in relation to each other. Now, outside the geospatial industry, this type of data is simply called location data. GIS is an acronym you might have heard before. It stands for geographic information system. GIS refers to all of the data, computer software and hardware, and the people that together make up a system for viewing, managing, and analyzing geospatial, or location, data.

Now, what are some examples of location data already being captured by businesses? Information about location is found in many of the business systems that are already in use today and that many of you are familiar with. Now, here are some examples. CRM, or your customer relationship management system, contains customer address information such as street, city, or postal code. Enterprise resource planning systems, or ERPs, may contain information on product planning, manufacturing, marketing, inventory, or shipping. Each of these has a location component. Where is my plant, my supplier, my customer, or my inventory? BI, or business intelligence, refers to decision support systems to enable both descriptive and predictive analysis with visualizations, alerts, and performance measurements. BI systems can pull data from various data sources. Your BI can encompass location data on sales, customers, suppliers, risk, and more.

Supply chain management systems, or SCMs, contain data including location of manufacturers, suppliers, distributors, retailers, or other customers. Well, other systems that may include a location component within an organization are content management or document management systems. As I mentioned earlier, the industries that leverage location information are many, including those you see here and so many more. Following this lecture, you'll find a couple of video testimonials in which business leaders describe how they used GIS to achieve the location advantage.

Later, you'll have a chance to use a cloud-based GIS for yourself as part of the case study exercises in this course. Not only will you learn how to bring more informed decision making to your business, I think you'll have some fun along the way. Enjoy!

