

Presentation Meta Data – INTERNAL

HIDE OR DELETE SLIDE BEFORE PRESENTATION

AUDIENCE (who is the target audience?)

- Higher education schools and colleges of business: Faculty, students, and administrators (deans, dept heads)

AUDIENCE NEED (what is the top need/pain of the audience?)

- Business schools want to innovate, provide career pathways for their students, and meet their department and university goals. Many want to incorporate location analytics but they don't know how to do so.

KEY MESSAGES (what 3 things will the audience remember?)

1. Location Analytics are increasingly in demand in the business workplace.
2. Location Analytics (GIS) can help business schools meet their instructional, school, and university goals.
3. Esri technology is a platform that can be effectively engaged as a pathway to location intelligence.

AUDIENCE ACTION (what do you want the presentation to achieve?)

- Use Esri location analytics software and spatial data for teaching, learning, and research.

Using Location Analytics Tools and Approaches in Higher Education Schools of Business

Joseph J. Kerski, PhD GISP

jkerski@esri.com



“ The willingness to experiment with innovative approaches to GIS has yielded benefits for numerous field-based teaching and research activities across the university.

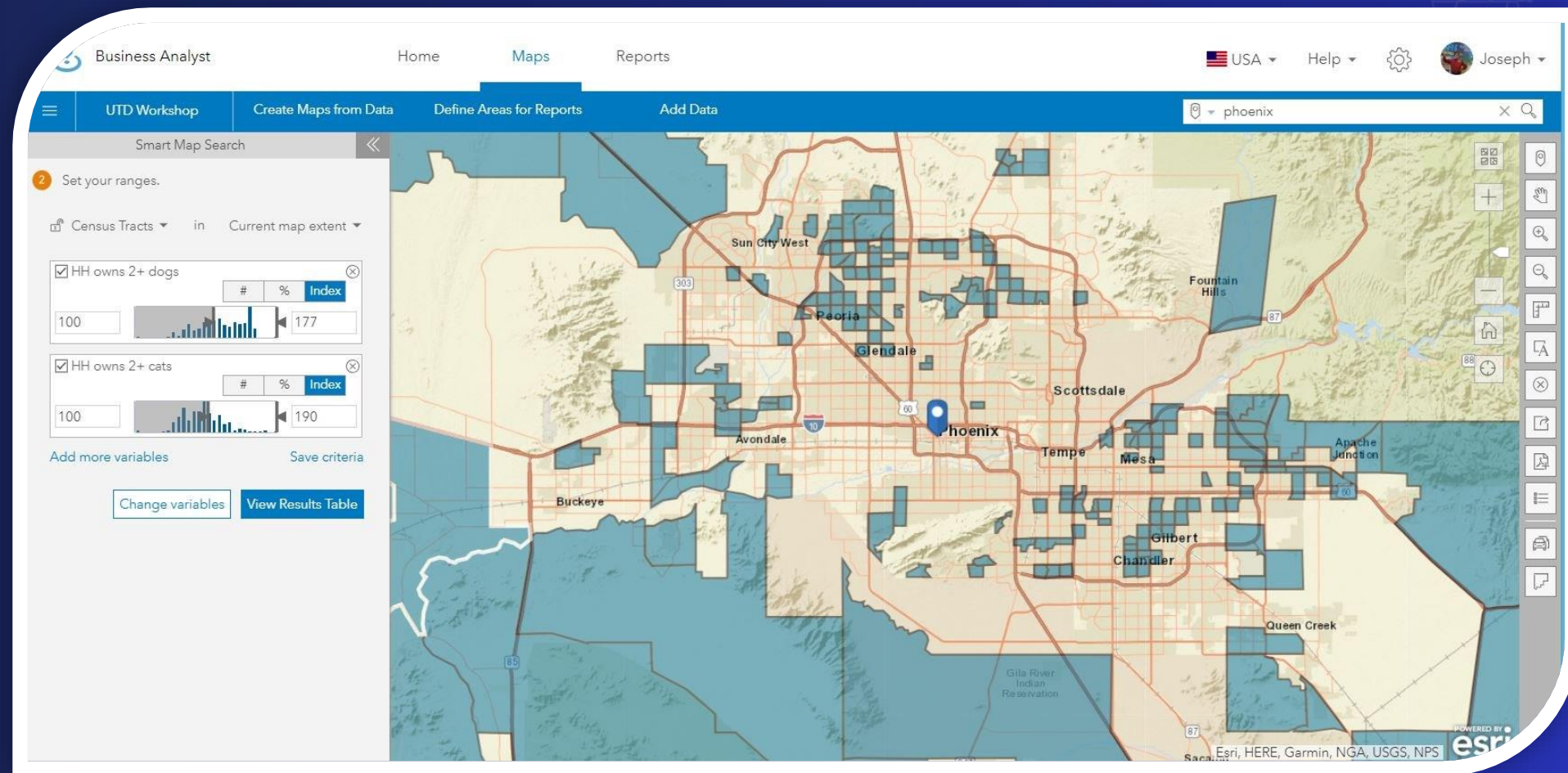
– Peter Knoop | University of Michigan

Purpose of this presentation

1. Help you understand the advantages for you to use Location Analytics in your instruction, research, and in your career path.
2. Empower you to use the Location Analytics tools that you already have on campus.
3. Connect you to the Esri support and resources available to you as business instructors and students.

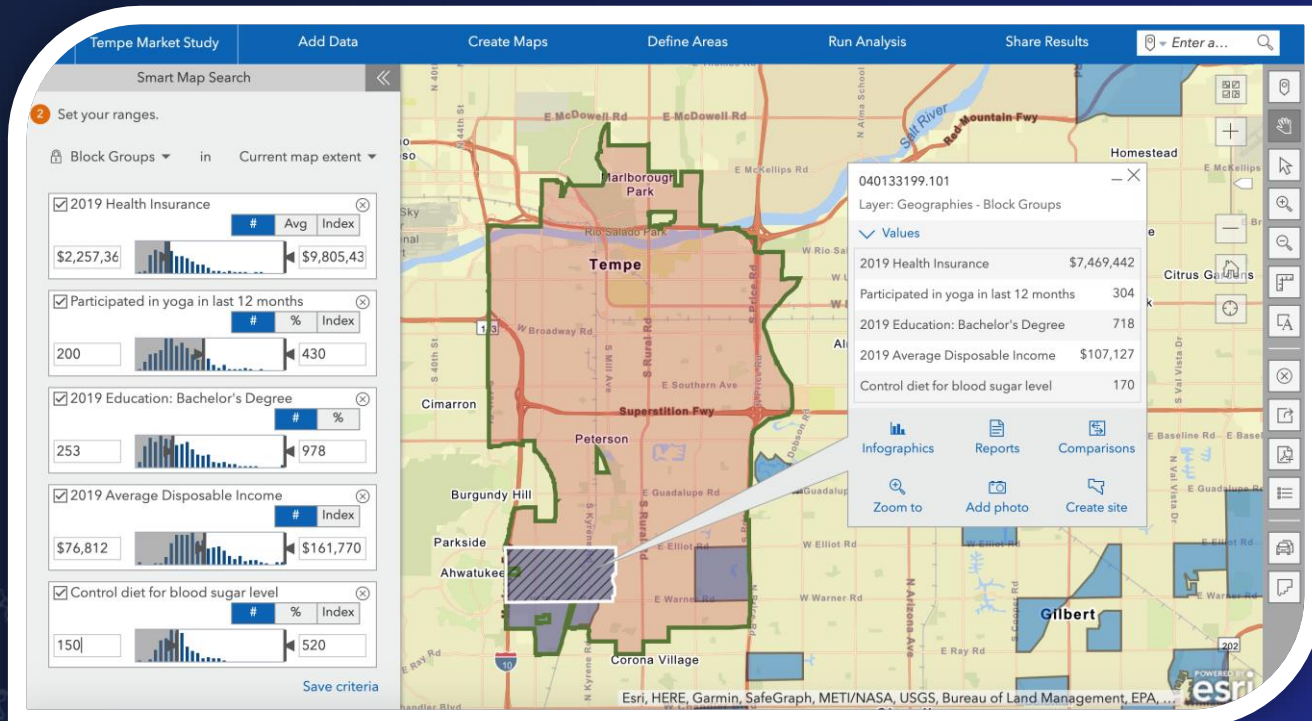
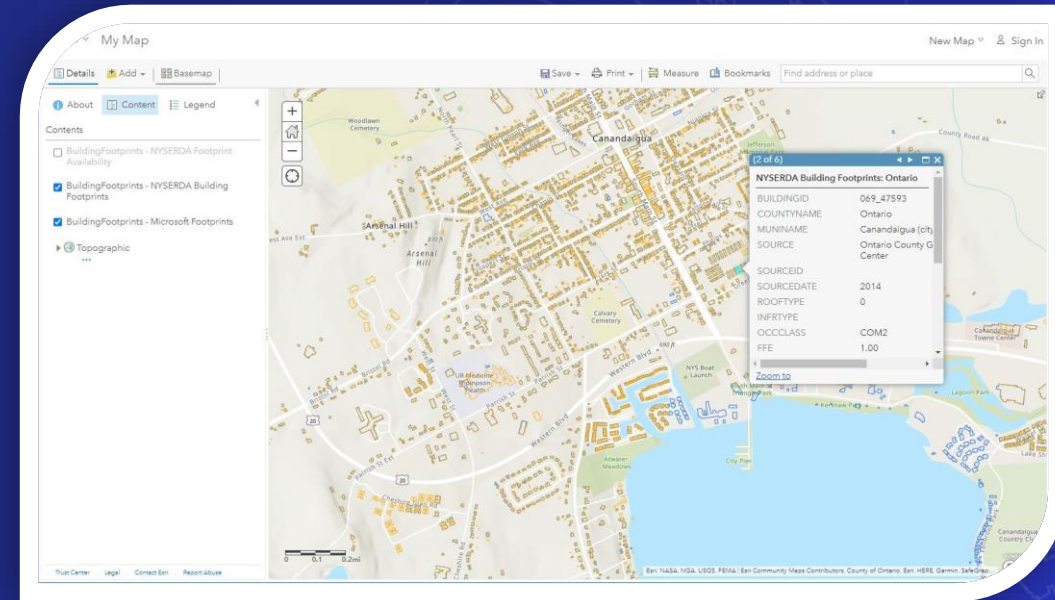
What is Location Analytics?

- Location, Location, Location: What's where, why is it there, why should we care?



Location Analytics:

- A set of tools and perspectives to help us understand geographic patterns, relationships, and trends.
- A decision support system to enable us to plan for a more economically vibrant, sustainable, resilient future.



What is the best tool?

- Answer _____.

What are the higher goals?

- Answer _____.



Location Analytics: 3 Components

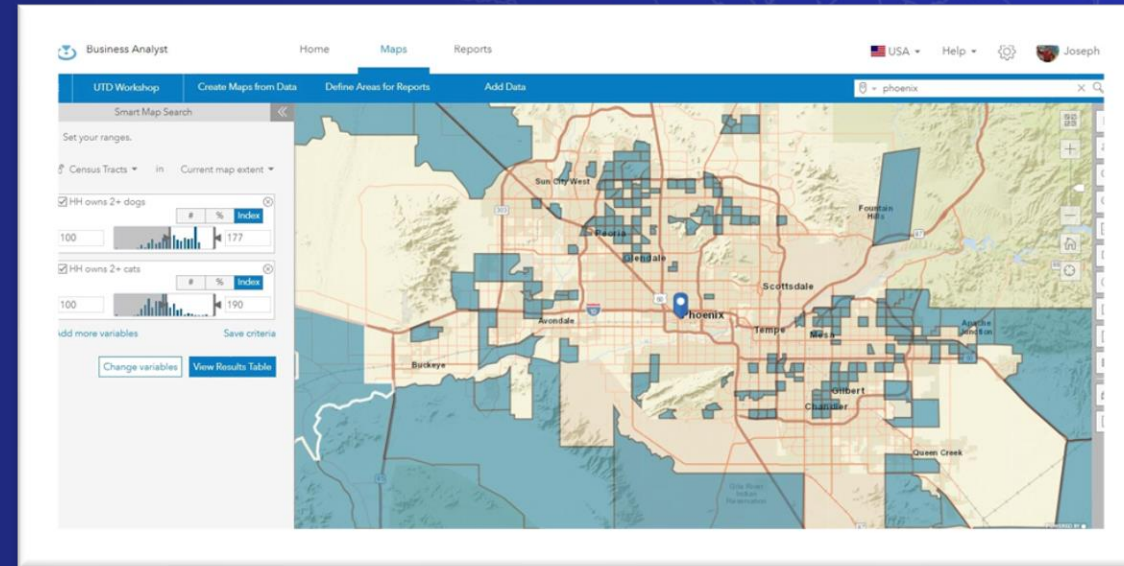
(1) Tools:

- Geographic Information Systems (GIS),
- web mapping,
- remote sensing,
- Global Navigation Satellite Systems (GNSS)/Global Positioning Systems (GPS).

Increasingly in cloud-based Software-as-a-Service (SaaS) environment—a Platform.

Includes field data collection tools.

Allows developers to build upon the platform via coding, SDKs, and APIs.

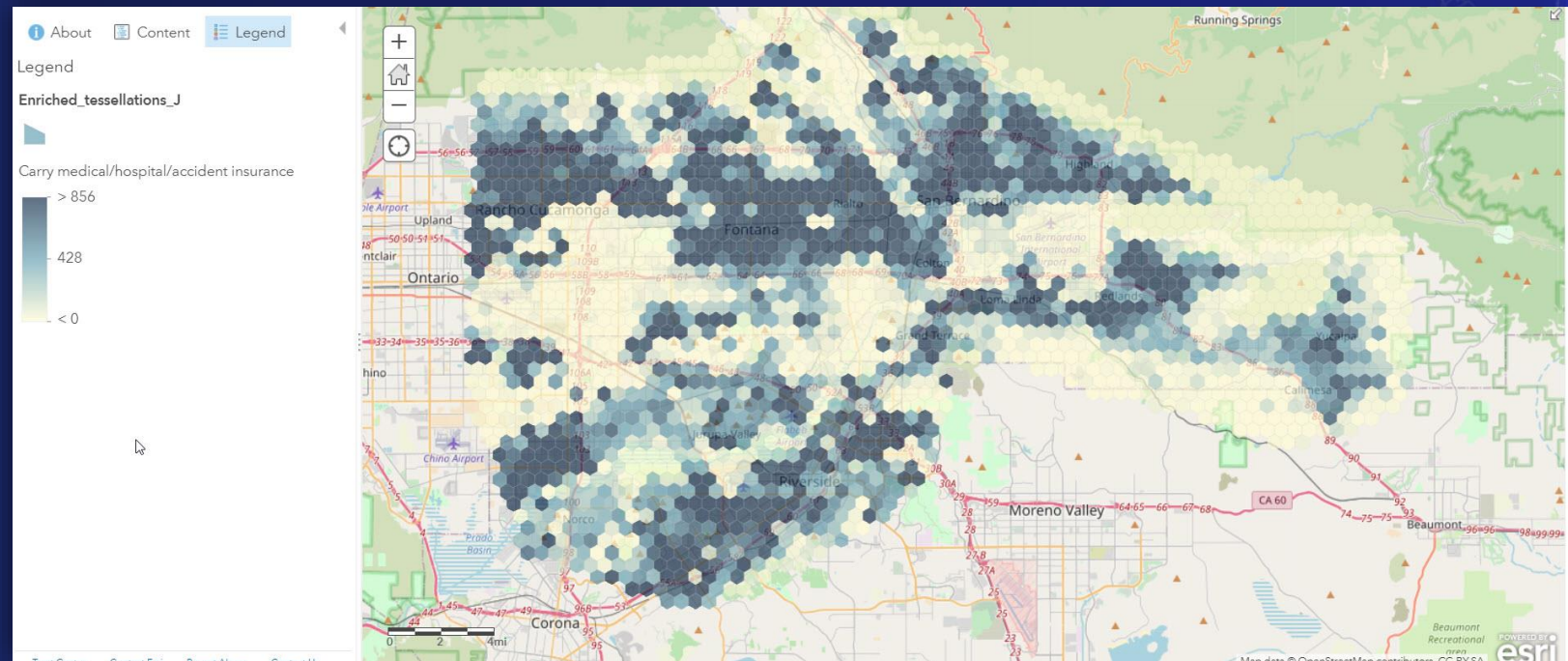


3 components of Location Analytics

(2) Data:

Consumer preference, lifestyle, demographics, environmental, location of competitors, suppliers, stores within the same franchise or chain, distributors, imagery, more.

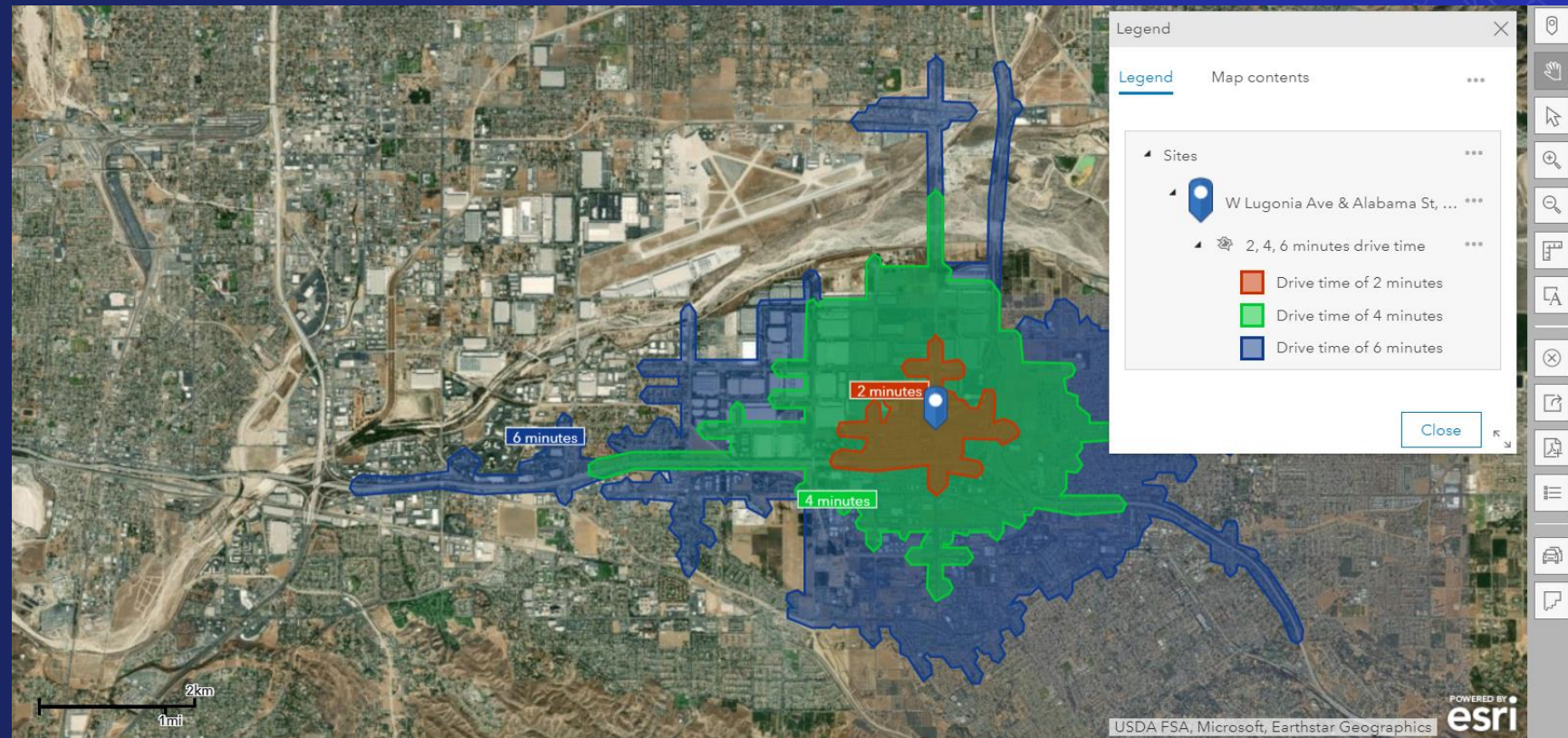
Contains location component (street address, latitude-longitude, place name, census enumeration area, political area).



Data:

Stored as points, lines, polygons, tables, images, or grids. Much scalable from local to global scale.

Much exists as cloud-based Data-as-Services, accessible via ArcGIS Hub sites, open data sites, in Business Analyst Web, and libraries such as the ArcGIS Living Atlas of the World.



3 components of Location Analytics

(3) Communication:

Maps are powerful means of communication and your options are increasingly varied.

- 2D and 3D maps,
- web mapping applications,
- tables,
- charts,
- dashboards,
- infographics,
- other multi-media visualizations.

All can be shared, combined, embedded. Boundary between maps and visualizations increasingly blurs, as the number of tools multiply.



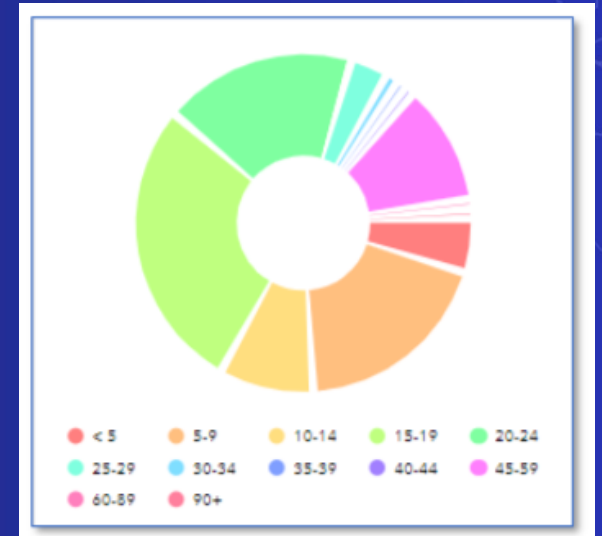
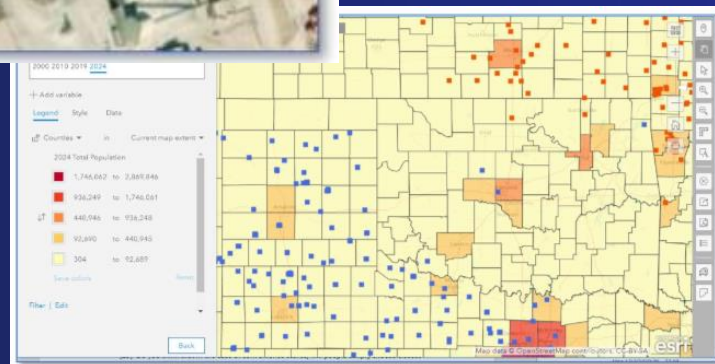
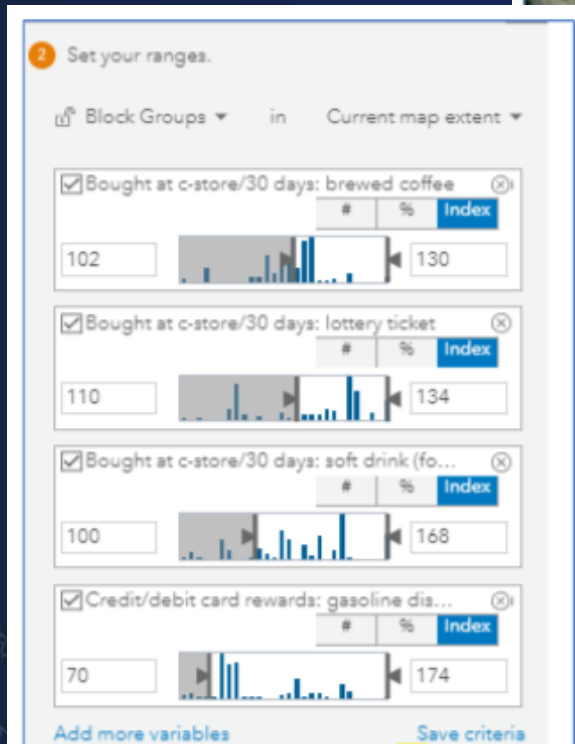
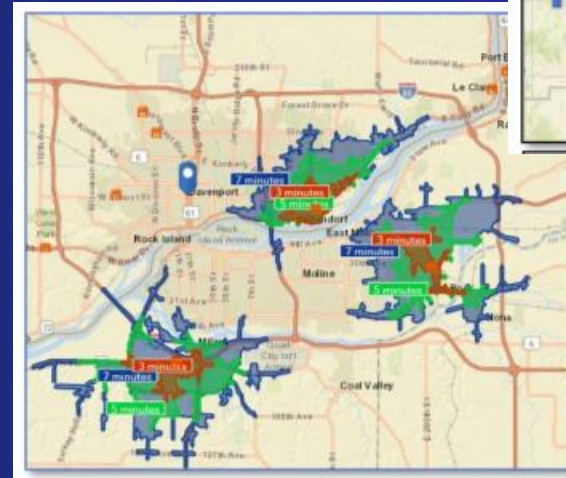
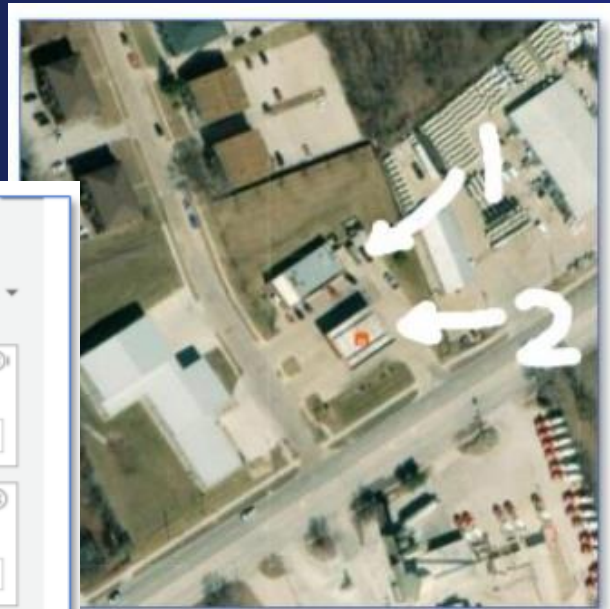
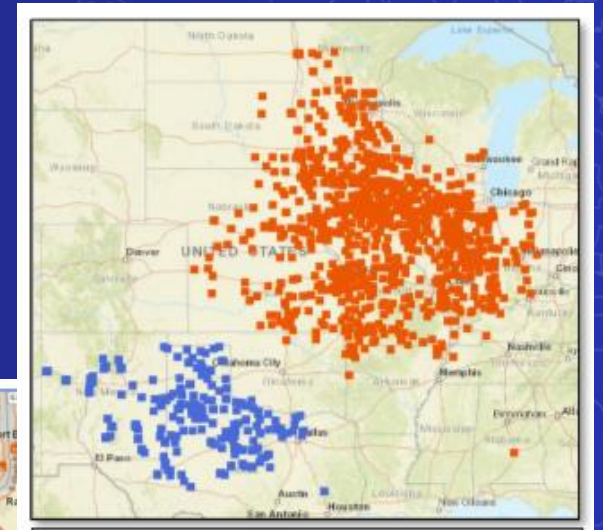
A blue-tinted background image showing a group of business professionals in a meeting, looking at a laptop. The image is semi-transparent and serves as a backdrop for the text.

Selected Instructional Demonstrations

Using Business Analyst Web

Analyzing Regional Business Patterns

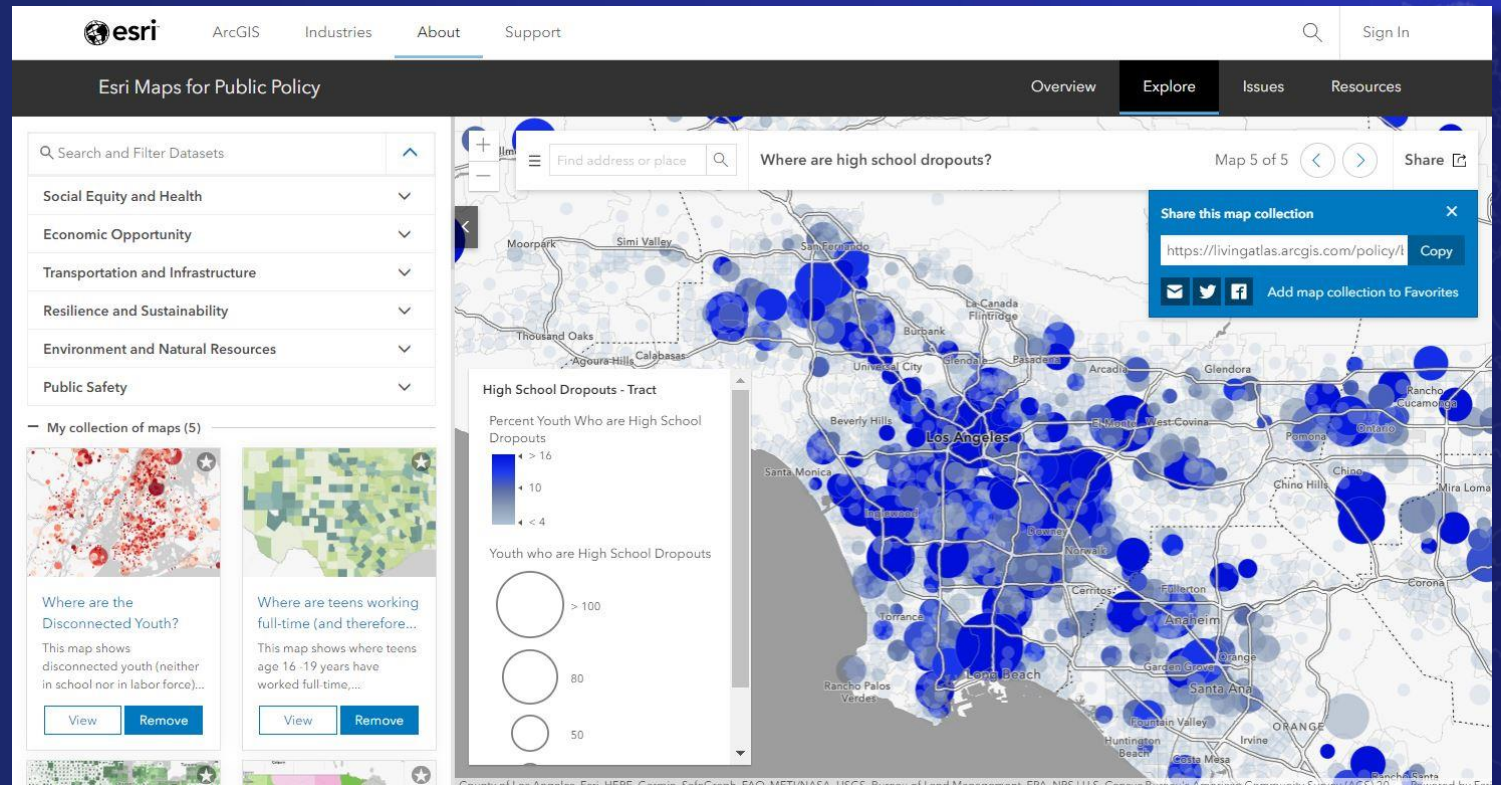
Site Selection: Convenience Stores



Location Analytics tools that are most relevant for business education

- Business Analyst Web
- ArcGIS Insights
- ArcGIS Online
- ArcGIS Pro
- ArcGIS Pro <-> R Bridge

You most likely already have Esri GIS technology on your campus!



The Bottom Line: Why Location Analytics in Business?

1) Businesses exist to add **value** → location is vital to all aspects of business → location analytics adds value to business decision making.

Wendy's: Fast-food giant Wendy's uses the mapping and spatial analysis in Esri's GIS software throughout the company—from marketing to operations and planning. Segmented demographic data in smart maps helps to inform staff making important merchandising decisions such as where to test new products. <https://www.esri.com/en-us/industries/retail/segments/merchandising>



The Bottom Line: Why Location Analytics in Business?

2) Businesses face an acute **shortage** of people who understand Location Analytics → Location Analytics is increasingly used in the world of business → Location Analytics thus needs to be taught in higher education schools of business.

From the Store to Your Door: How Location Analytics Enable Home Delivery:

<https://retailtouchpoints.com/features/executive-viewpoints/from-the-store-to-your-door-how-location-analytics-enable-home-delivery>

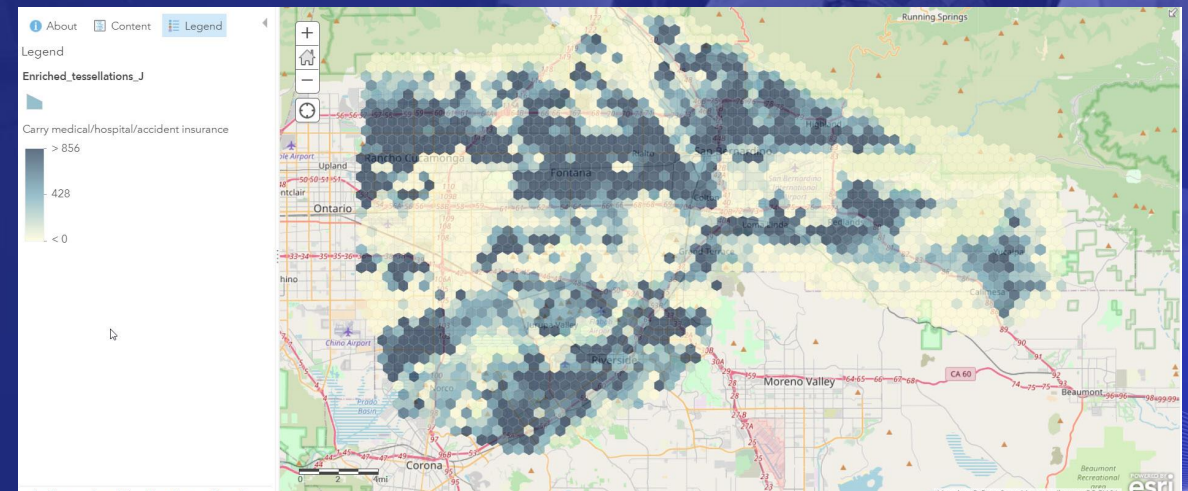
The modern consumer's expectations of retailer performance and service continue to increase exponentially as more and more businesses undergo the inevitable digital transformation toward being completely connected with their customers. Almost every consumer today has access to a smartphone, a tablet device, or – at the very least – the Internet, and this affords them the ability to interface with the businesses they purchase from, on their own terms. Individuals can search for, compare and purchase merchandise without leaving home, but they can also use these capabilities to enhance their in-store experiences. People can check the location of a department store for an in-stock item simply by checking their cell phones.



The Bottom Line: Why Location Analytics in Business Schools?

3) Using Location Analytics in your school of business will help your school and university meet its goals of empowering graduates who are critical and spatial thinkers, and **leaders**, and will help your school remain **innovative** and **competitive**.

5 Shining Examples: <https://www.esri.com/en-us/industries/blog/articles/gis-schools-of-business/>

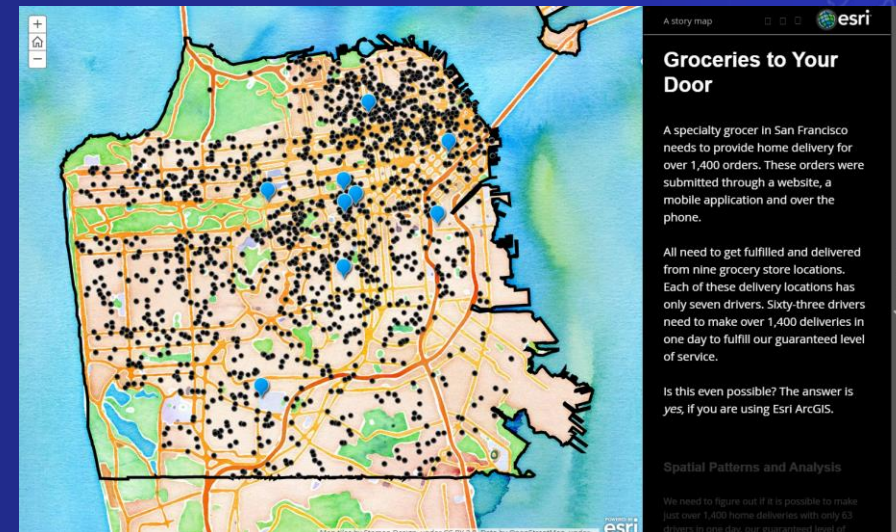


Location Analytics in Managing and Planning for Change.

1. Increasingly used in decision making in business.
2. Enables businesses to achieve their mission, serve their customers, and benefit society.
3. The world of business is in a state of continual **change**.
4. Enables businesses to manage **current** operations and to plan for and enable **change**.
5. Increases the employee's value to a current or future employer.
6. Helps any School of Business become more vibrant and relevant for their campus and the greater society.
7. Has migrated to a cloud-based environment, enabling collaboration, analysis, and communication.

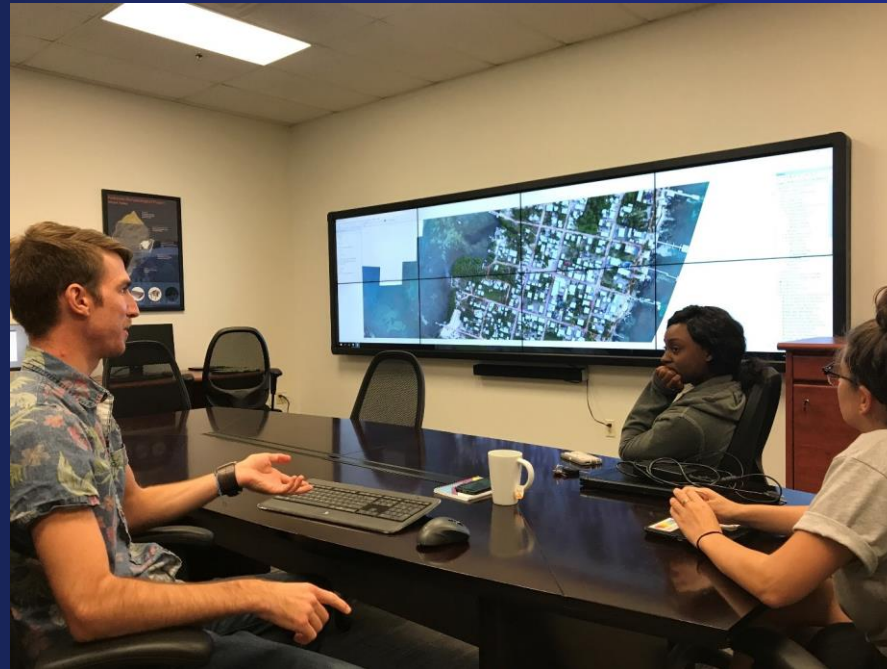
Example: Groceries to your door:

<http://commteamretail.maps.arcgis.com/apps/MapJournal/index.html?appid=502ed86d36a94eedab8f12365951fd94>



Why Location Analytics in business education?

- (1) For your University, Community College, Tribal College, or Technical College School of Business to remain **innovative**, and
- (2) for your graduating students to be **competitive** in the business workplace, your faculty and students need to use innovative approaches and tools such as Location Analytics.



Why Location Analytics in business education?

(3) Your school of business is competing for students, grant funding, and money from corporations.

(4) Your university must demonstrate that your students are employable after graduation.

This (# 4) reason helps attract --

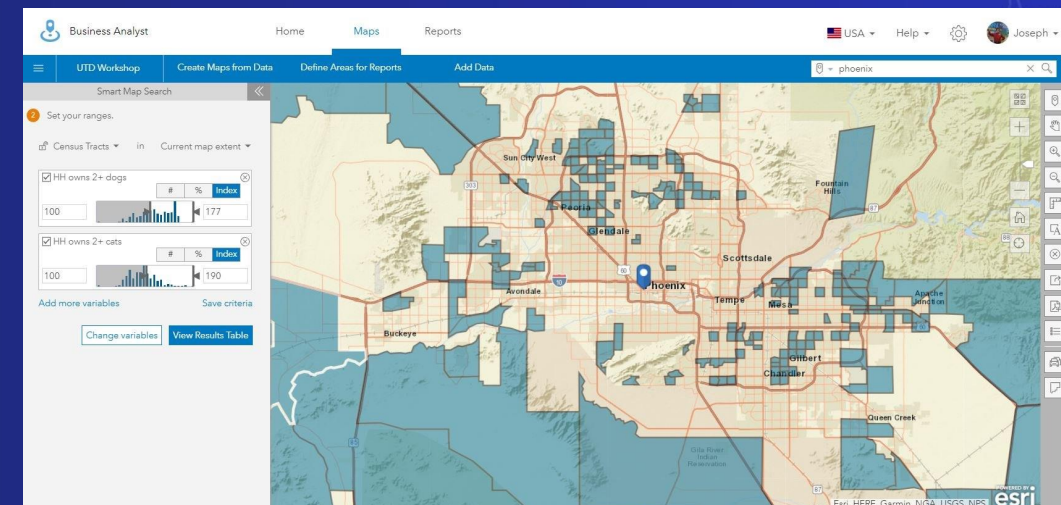
(A) Continuing applications to your program from new students.

(B) Attention within your own campus (including funding, space, faculty and staff hires, labs, equipment, software).



Areas in Schools of Business in Which Location Analytics is used

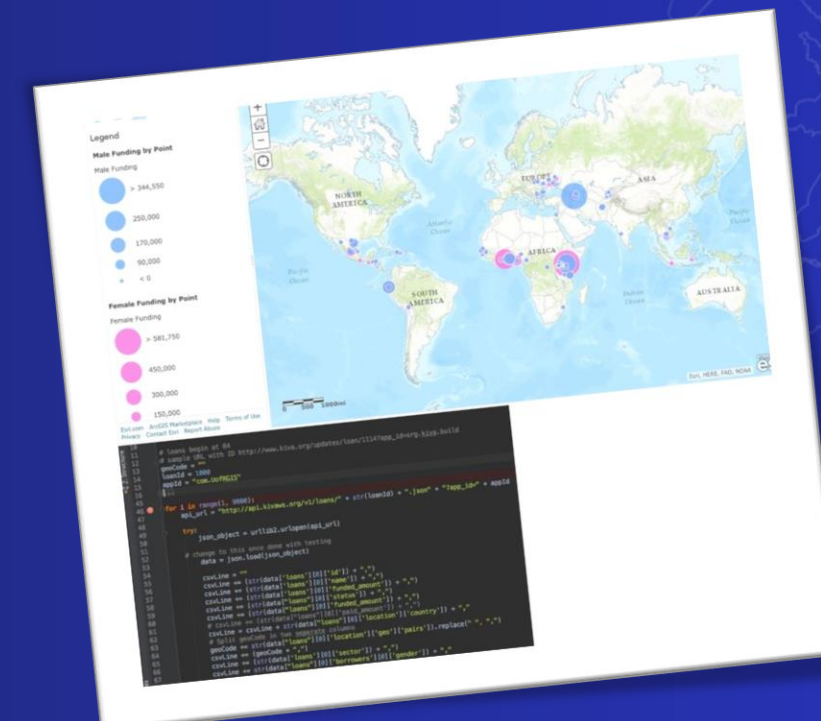
- Marketing
- Management, including International Business, and Operations Management (Internet of Things, Plant Processes)
- Finance
- Consumer Behavior
- Risk Assessment
- Computer Information Systems
- Accounting
- Supply Chain Management.



Selected Universities Using Location Analytics

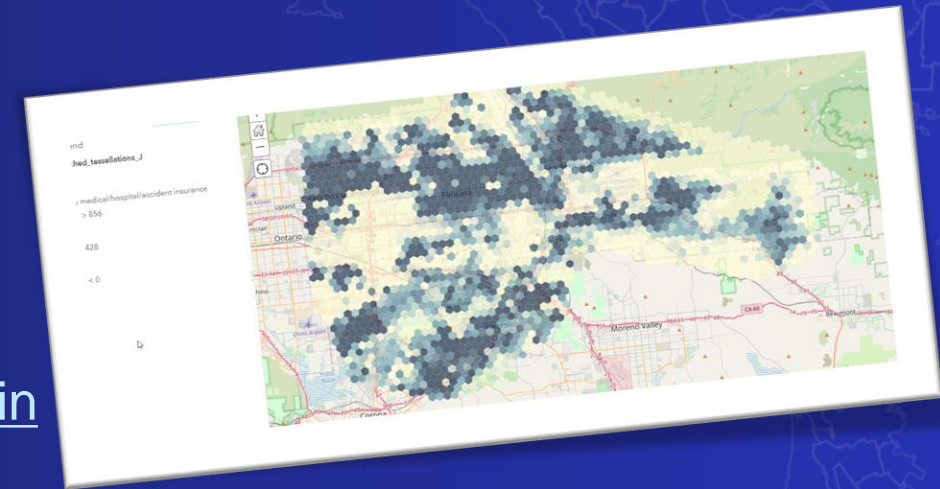
Article: 5 Shining Examples of the Use of GIS in University Schools of Business

- University of California San Diego's Master of Science in Business Analytics program: Capstone.
- James Madison University Supply Chain Management courses use ArcGIS Online and ArcGIS Pro, including hospital certification and maritime analyses.
- Arizona State University uses location analytics in their new Applied Business Data Analytics certificate.



Selected Universities, continued...

- Texas Christian University Neeley School maintains advisory board of 16 companies, hosts annual supply chain competition.
- University of Redlands MBA program with concentration in Location Analytics, plus Center for Spatial Business.
- Carroll College Analytics and Business Program.



Who hires students with Location Analytics Skills, and Why?

- Ford

Innovation in the face of falling personal car ownership.

- Fruit of the Loom

Supply chain, merchandising in individual stores and online.

- John Deere

Winning the market with data-driven solutions.



The background of the slide features a blue-tinted photograph of a diverse group of people in a professional setting, likely a meeting or collaborative workspace. They are gathered around a table, looking at documents or a laptop. The image is semi-transparent, allowing the text to be clearly visible. At the bottom of the slide, there are decorative white wavy lines that sweep across the width of the page, with small orange hexagonal icons placed at various points along these lines. A solid orange horizontal bar is located at the very bottom of the slide.

Resources and Encouragement

Keep exploring

Keep Learning!

- Business Education Landing Page: <https://www.esri.com/en-us/landing-page/industry/education/2020/business-education>
- Curricular resources: <https://community.esri.com/t5/education-blog/curricular-resources-and-messaging-for-teaching-location/ba-p/884279>
- Learn ArcGIS Gallery of business lessons: <https://learn.arcgis.com/en/gallery/#?q=Business>
- Esri Academy business-related courses: www.esri.com/training/Bookmark/P3NXNMC5G
- Introduction to Business Analyst Web, recorded webinar: <https://youtu.be/xelf01CXCkQ> + Resources go.esri.com/BA/Resources + Videos: go.esri.com/BA/Videos and + Data: [https://go.esri.com/BA/Data](http://go.esri.com/BA/Data)

Why this matters

- Students who understand how to think spatially and use Location Analytics can be a powerful and positive force in your university, in their future workplace, and in the global economy.
- Empowered with employees who use Location Analytics, businesses will become vibrant and efficient, enabling a **prosperous** economy and **sustainable environment** for all.



esri

**THE
SCIENCE
OF
WHERE**