

## Week 2: Supply Chain Investigation StoryMap Assignment

GEOG 30763: Economic Geography | Summer 2025

### Assignment Overview

**Points:** 100 points

**Due Date:** Sunday, July 20, 2025, 11:59 PM

**Format:** ArcGIS StoryMap with global supply chain mapping and analysis

**Length:** 1,500-2,000 words + maps, photos, and network diagrams

### Learning Objectives

By completing this assignment, you will:

- Trace complex global supply chains and production networks
- Analyze spatial dimensions of uneven development
- Understand how local consumption connects to global production
- Examine power relationships within transnational corporations
- Develop skills in network analysis and supply chain mapping

### Assignment Description

You will conduct a detailed investigation of the supply chain for a product you use regularly, tracing its journey from raw materials to final consumption. This assignment combines personal consumption analysis with broader investigation of global production networks, labor conditions, and uneven development patterns.

### Core Requirements

#### Assignment Scope and Limitations

**IMPORTANT:** This assignment focuses on **depth over breadth**. Rather than attempting to trace every component of a complex product, you will select a **manageable subset** for detailed analysis. This approach allows for more thorough investigation while keeping the project realistic for a one-week timeframe.

## General Scope Guidelines:

- **Complex Products (phones, cars, etc.):** Select 3-5 key components maximum
- **Simpler Products (clothing, food):** Focus on 2-3 main material inputs or processing stages
- **Geographic Focus:** Trace supply chains through 5-8 countries maximum
- **Research Depth:** Prioritize detailed analysis of selected components over superficial coverage of many parts

**Research Strategy:** Start with the most significant components (by value, environmental impact, or labor intensity) rather than trying to map every element. Your goal is to demonstrate understanding of supply chain geography through focused examples.

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## I. Product Selection & Justification (15 points)

Choose ONE product from these categories:

### Electronics Option:

- **Product:** Smartphone, laptop, gaming console, or smart device you personally own
- **Scope Limitation:** Select 3-5 key components (e.g., processor, battery, screen, camera, rare earth minerals)
- **Focus:** Complex global supply chains, rare earth mining, and high-tech manufacturing
- **Example:** iPhone - focus on lithium for battery (Chile), rare earth elements for processor (China), assembly (China), and final retail distribution

### Clothing/Textiles Option:

- **Product:** Specific item of clothing you own (jeans, sneakers, jacket, etc.)
- **Scope Limitation:** Focus on 2-3 main materials (e.g., cotton, synthetic fibers, dyes, hardware)
- **Focus:** Global garment industry, labor conditions, and textile production

- **Example:** Jeans - focus on cotton growing (India/USA), denim processing (Mexico), final assembly (Bangladesh), and retail distribution

#### Food/Beverage Option:

- **Product:** Processed food item you consume regularly (coffee, chocolate, packaged snacks, etc.)
- **Scope Limitation:** Focus on 2-3 main ingredients or processing stages
- **Focus:** Agricultural commodity chains, food processing, and trade relationships
- **Example:** Chocolate bar - focus on cocoa beans (Ghana), sugar (Brazil), milk powder (New Zealand), and final processing/packaging

#### Automotive Option:

- **Product:** Vehicle you or your family owns (car, motorcycle, etc.)
- **Scope Limitation:** Select 3-5 major components (e.g., engine, tires, electronics, steel, glass)
- **Focus:** Automotive global production networks and just-in-time manufacturing
- **Example:** Toyota Camry - focus on steel (Japan/Korea), tires (Thailand), electronics (Germany), final assembly (Kentucky), and North American distribution

#### Justification Requirements:

- Explain why you chose this product and specific components
- Describe your personal relationship to/use of this product
- Justify why these particular components offer interesting supply chain geography
- Explain how your selected components represent broader patterns in the industry

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## 2. Supply Chain Research Component (30 points)

### Stage I: Product Autopsy

- Physically examine your chosen product
- Document all visible labels, tags, and manufacturing marks **for your selected components**
- Photograph key identifying information
- Research company ownership structure and corporate hierarchy

### Stage 2: Focused Supply Chain Mapping

- Identify 5-8 countries involved in producing your selected components
- Research raw material sources and extraction locations **for chosen components only**
- Trace manufacturing/assembly stages and locations
- Identify key transportation routes and logistics hubs
- Investigate retail/distribution networks

### Stage 3: Labor & Production Analysis

- Research working conditions at different supply chain stages **for your selected components**
- Identify key production facilities and employment practices
- Analyze wage differentials across different locations
- Investigate environmental impacts of production processes

### Required Documentation:

- Supply chain flowchart showing all stages **for selected components**
- Corporate ownership diagram
- Detailed notes with credible sources (minimum 8-10 sources)
- Original photographs of product and packaging with component identification

**Research Strategy Note:** Use your selected components as "windows" into broader supply chain patterns. For example, if studying smartphone batteries, discuss how lithium mining in Chile represents broader patterns of resource extraction and global inequality.

## StoryMap Structure and Organization

### Required StoryMap Sections:

#### 1. Introduction & Product Story (250-300 words)

- Engaging hook connecting personal use to global networks
- Clear thesis about supply chain geography findings
- Overview of investigation methodology
- Preview of key discoveries

#### 2. Supply Chain Journey (500-600 words)

- Systematic narrative following product from raw materials to consumption
- Integration of maps showing spatial progression
- Detailed description of each stage with supporting evidence
- Use of multimedia to illustrate key points

#### 3. Uneven Development Analysis (400-500 words)

- Analysis of how value is distributed across space
- Discussion of winners and losers in the supply chain
- Examination of labor conditions and environmental impacts
- Connection to broader patterns of global inequality

#### 4. Corporate Power & Network Control (300-400 words)

- Analysis of corporate strategies and spatial organization
- Discussion of governance and coordination mechanisms

- Examination of how power shapes spatial relationships
- Consider resistance and alternative approaches

#### 5. Personal Reflection & Broader Implications (200-300 words)

- Reflection on what you learned about your own consumption
- Discussion of broader implications for global economic geography
- Consider alternatives and possibilities for change
- Personal commitment to more conscious consumption

#### Special Requirements

##### Network Visualization:

- Create compelling network diagrams showing supply chain relationships
- Use appropriate symbols and colors to show different types of connections
- Include quantitative data where possible (distances, values, employment)
- Make complex networks accessible to general audiences

##### Multimedia Integration:

- Include original photographs of your product and its packaging
- Integrate maps seamlessly with narrative text
- Use StoryMap features effectively (timeline, comparison, etc.)
- Create engaging visual hierarchy and flow

##### Research Quality:

- Use credible sources including academic research, industry reports, and journalism
- Balance corporate sources with critical analysis and alternative perspectives
- Include voices of workers and communities affected by supply chains
- Cite all sources properly and provide transparent methodology

## Evaluation Criteria

### Excellent (90-100 points):

- Sophisticated supply chain analysis with clear theoretical connections
- High-quality research with diverse, credible sources
- Professional StoryMap with effective multimedia integration
- Original insights about global production networks and uneven development
- Strong analytical writing with clear argument development

### Good (80-89 points):

- Solid supply chain analysis with appropriate use of course concepts
- Adequate research with good source diversity
- Well-designed StoryMap with appropriate multimedia use
- Clear understanding of network geography and corporate power
- Good writing with clear organization and flow

### Satisfactory (70-79 points):

- Basic supply chain analysis meeting minimum requirements
- Adequate research but limited source diversity or depth
- StoryMap meets technical requirements but lacks polish
- Shows understanding of basic concepts but limited synthesis
- Acceptable writing with some organizational issues

### Needs Improvement (Below 70 points):

- Insufficient supply chain analysis or weak theoretical connections
- Inadequate research or poor source quality
- Technical problems with StoryMap or poor design choices

- Limited understanding of course concepts
- Writing issues that interfere with communication

## Research Resources

### Recommended Starting Points:

- Company annual reports and sustainability reports
- Industry trade publications and market research
- Labor rights organizations (ILO, Fair Trade, etc.)
- Environmental organizations and impact assessments
- Academic databases (Business Source Premier, etc.)
- Government trade statistics and customs data

### Data Sources:

- UN Comtrade Database for trade flows
- World Bank indicators for economic development
- ILO statistics for labor conditions
- Environmental impact databases
- Corporate social responsibility reports

## AI Policy for Technical Support

### Newly Permitted AI Use for Technical Tasks:

- "How do I create flow lines between cities in ArcGIS Online?"
- "What's the best way to show global trade routes on a world map?"
- "How do I add multiple types of symbols to show different supply chain stages?"
- "How do I create informative pop-ups for supply chain locations?"
- "What color scheme works best for showing different countries/regions?"

- General troubleshooting for ArcGIS Online mapping and StoryMap integration

#### Still Prohibited AI Use:

- Writing any portion of your analysis or narrative
- Generating supply chain research or corporate analysis
- Creating theoretical connections or critical analysis
- Completing spatial analysis or map interpretation

#### Technical Support Resources:

- Companion guide for supply chain mapping in ArcGIS Online
- Template world map with economic centers and trade routes
- Sample supply chain StoryMaps for reference
- Virtual office hours for technical assistance

#### Submission Requirements

1. **StoryMap URL:** Submit working link to published StoryMap
2. **Research Portfolio:** Organize all sources, notes, and documentation
3. **Supply Chain Diagram:** Submit detailed network diagram as separate file
4. **Reflection Paper:** 1-page reflection on research process and personal learning

#### Getting Started Checklist

- Select product and conduct initial "autopsy" examination
- Research corporate ownership and basic supply chain information
- Create preliminary supply chain map/diagram
- Identify key research sources and databases
- Plan StoryMap structure and multimedia integration
- Begin detailed research on each supply chain stage

- [ ] Start creating maps and visualizations

### Questions?

Contact Dr. Crotty during virtual office hours (Tuesdays 12:30-1:30 PM) or via email. Supply chain research can be complex, so don't hesitate to ask for guidance on research strategies or sources.

**Success Tip:** Start with your product's corporate website and annual reports, then branch out to critical sources. The best investigations combine corporate information with independent research and alternative perspectives.