GIS & Retail site selection

CRP-514
Geographic Information Systems

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Geographic Information Systems

GIS is a highly technological field that incorporates graphical information with tabular data to solve real world problems. It is a system of computer software, hardware, data, and personnel to help manipulate, analyze and present information that is tied to a spatial location. It is often called a "mapping software", as it links attributes and characteristics of an area to its geographic location. It is used in a variety of applications that include exploration, demographics, dispatching, tracking, site selection and map making.
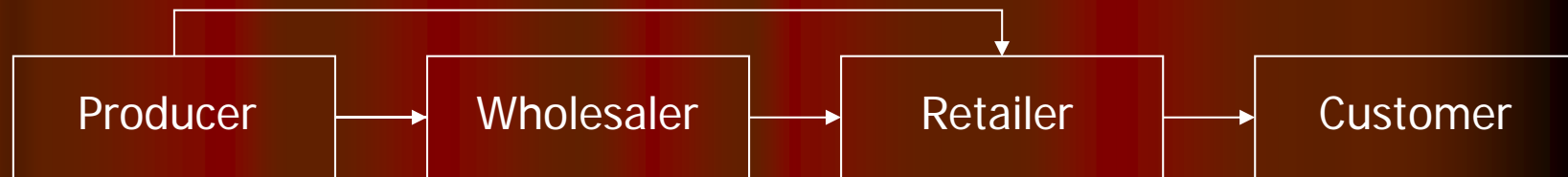
Why GIS?

GIS provides a system for managing business information of any kind according to its location. Bringing together data with a shared spatial component can reveal trends and patterns that are not apparent with tabular databases.

Retailing

- A retailer buys goods or products in large quantities from manufacturers, either directly or through a wholesaler, and then sells small quantities to the end-user customers.

- Retailers are at the end of the supply side of the supply chain.

- Marketers see retailing as the most important part of the supply chain because they are in direct contact with the end users

Retailing (contd…)

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│                                                  ↓
┌──────────┐      ┌──────────┐      ┌──────────┐      ┌──────────┐
│ Producer │ ──→  │Wholesaler│ ──→  │ Retailer │ ──→  │ Customer │
└──────────┘      └──────────┘      └──────────┘      └──────────┘
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GIS and Retail site selection

- "Build it, the customers will come."...????
  - Fast paced lifestyle.
  - Information technology, one click shopping.
  - Competition
- GIS helps business do site selection by answering questions like
  - How to penetrate the market?
  - What is the current market share?
  - Where should a new store, warehouse or other facility be located?
  - How can the sales of existing stores be protected from the new store?

GIS and Retail site selection

- GIS offers a better way to find the right site for a new store
  - blend customer surveys with census data to visualize market penetration, market share, and predict customer loyalty for a new location.
  - compare the best existing location with other proposed locations.

How to penetrate the market?

- Study customer information through store cards and customer loyalty schemes.

- Identify market segments using geodemographic data
  - expenditure patterns
  - buying power - income
  - Population size

- Other characteristics of the market area's population can be studied
  - Population estimates and projections: population movements to predict future demand
  - Existing competition
  - Drive times

Market share

- Evaluate the existing market share

- Strategic planning to increase market share with the new facility

- Use GIS to avoid any geographic conflicts that may affect the sales of existing stores

Location of the new facility

- Competitor locations
  - quantitative information on competitor activity like location, size and performance of competitor locations.

- High Population density

- Large percentage of the target demographic

- Adequately far from existing profitable stores

Case: Levi Strauss & Co. (LS&CO.)

- Levi Strauss, North America, a division of Levi Strauss & Co. (LS&CO.)
  - **The Challenge:**

    LS&CO. wanted to increase distribution to more specialty stores such as general merchandise, work wear and western apparel outfitters. LS&CO. wanted a tool that would geographically display its existing authorized retailers, potential retailers, and the customers the distributors serve. A strategy was required that would ensure that new stores would not adversely impact the sales opportunities of existing stores.

Case (contd...)

- **<u>The Solution</u>**

  The LS&CO. marketing group has used ESRI® software for several years. The LS&CO. Sales Center decided to review geographic information system (GIS) software to help manage its distribution. It began using BusinessMAP® desktop mapping software and it was a great cost-effective tool to use in researching new look in these channels of distribution

Case (contd…)

- The system enables users to choose an address or predetermined latitude and longitude coordinates as the center point of a ring study area in one-, three-, and five-mile ring reports.

- Next, the potential retailers' locations are entered. If the location is deemed to be too close to an existing store, the location is rejected.

Case (contd...)

- **<u>Results</u>**

  - LS&CO. streamlined its review process of new retailer applications into a solution that allows it to see prospects geographically in relation to existing stores.

  - LS&CO. now uses this solution to view the information **accurately and consistently** to make informed decisions before opening a new retail account. These analyses were originally performed by an outside vendor, but LS&CO. wanted to streamline this process and gain more autonomy.

  - LS&CO. has found a **cost-sensitive solution** that allows it to accurately see where retailers are located, avoid unnecessary site visits, and open competitive stores.

  - LS&CO. believes that this analysis better meets its customers' needs by bringing the right products to the stores where these consumers shop.

  - An easy-to-use tool that allows LS&CO. to better manage its retail distribution strategies.

Other Application of GIS in Retailing

- Store development and Facilities management

- Supply chain operations

- Mapping customers

- Marketing and Advertising

Conclusion

GIS is a strategic tool that helps one make better decisions, save money, save time and help retailers gain competitive advantage in making retail site-selection.

Thank you!!!

Questions????