

# Location Analysis

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# Learning Objectives

- Understand that the location decision is a dynamic opportunity
- Determine the demographic and competitive profiles of an area
- Understand the relationship of marketing strategy to demographic and competitive profiles of an area
- Enumerate the different types of locations
- Utilize appropriate sources of demographic data
- Describe a method to define a trading area
- Evaluate an area in terms of potential sales

# Marketing Mix

- Place
- Price
- Product
- Promotion

# Location Variables

- The consumer mix of the area
- Competitive environment existing in that location

# Marketing Mix Interfaced with Locational Variables

- Place
  - Income changes
  - Age changes
  - Environmental changes
  - Competition

# Marketing Mix Interfaced with Locational Variables

- Price
  - Competition
  - Number of traditional and non-traditional pharmacy outlets
  - Number of non-pharmacy competitors

# Marketing Mix Interfaced with Locational Variables

- Product
  - Age
  - Income
  - Education
  - Number of physicians
  - Type of physicians

# Marketing Mix Interfaced with Locational Variables

- Promotion
  - Consumer preferences
  - Purchase behavior

# Competitive Advantage

- Marketing strategy
- Create a difference
- First choice

# Marketing Perspective

- Location analysis becomes dynamic process
- Process of re-evaluation
- Support growth

# Changing Questions

- How many people live in the area?
- What changes will occur in the area?
- How can I profitably adapt to those changes?

# Location Analysis Distillation Process

- Overall region
- City
- Specific site

# Selection of Location

- Primary characteristics
- Secondary characteristics

# Primary Considerations

- Population
- Prescription buying power
- Physician availability
- Competition
- Community trends

# Population Trends

- Suggested considerations:
  - Average age
  - Average income
  - Purchasing power
  - Level of education
  - Ethnicity
  - Home ownership
  - The size of the average family

# Prescription Buying Power

- Suggested considerations:
  - Purchasing power
  - Number of prescriptions utilized by the average family
  - Population's income sources
  - Prevalence of third-party payment plans, both private and public
  - Average prescription price

# Physician Availability

- Suggested considerations:
  - Number of prescriptions written by physicians
  - Number of physicians
  - Type of physicians

# Competition

- Suggested considerations:
  - Pharmacies
  - Supermarkets
  - Hospital out-patient pharmacies
  - HMO's
  - Mail order
  - Non-traditional competitors
  - Mass merchandisers

# Community trends

- Suggested considerations:
  - Trends in school enrollments
  - Businesses
  - New housing starts
  - Degree and type of civic and social involvement
  - Attitudes toward providing needed services and improvements

# Secondary Considerations

- Legal restrictions
- Manpower availability
- Inventory/supplier services
- Capital and credit
- Media sources

# Information Sources

- U .S. Department of Commerce
- Bureau of the Census
- Sales and Marketing Management: Survey of Buying Power
- NCPA-Pharmacia Digest
- CDC's National Center for Health Statistics

# Suggested Internet Sites

- [www.census.gov](http://www.census.gov)
- <http://www.cdc.gov/nchs/>
- <http://www.salesandmarketing.com/salesandmarketing/>

# U.S. Department of Commerce Census of Population and Housing Characteristics

- Representative data includes:
  - Number of households in each town
  - Dollars of income of the population
  - Amount of dollar sales in pharmacies in the town
  - Breakdown of population by age group

# U.S. Department of Commerce Census of Population and Housing Characteristics

- Representative data includes:
  - Sales per household in drugs
  - Number of households
  - Number of families
  - Number of individuals 65 and older living alone

# Census of Retail Trade

- Representative data includes:
  - Number of drugs and proprietary stores
  - Sales per drugs and proprietary stores
  - Annual payroll

# Sales and Marketing Management: Survey of Buying Power

- Representative data includes:
  - Effective buying income and retail sales
  - Consumer spending
  - Demographic data
  - Buying power index

# Data on Competition

- Representative sources include:
  - Market research agencies
  - Pharmaceutical manufacturers and wholesalers
  - Telephone listings
  - Personal observations

# Pharmacy Characteristics

- Representative sources include:
  - Local and state pharmacy associations
  - State boards of pharmacy
  - Pharmaceutical manufacturers and wholesalers

# Two Additional Analyses at the City or Area Level

- Determining the type of location within a city or an area
- Trading area analysis and site selection

# Determining the Type of Location within a City or an Area

- Possible framework for categorizing various locations:
  - Unplanned business districts
  - Planned business districts<sup>1</sup>

# Determining the Type of Location within a City or an Area

- Functional location patterns:
  - Suscipient
  - Interceptive
  - Generative<sup>2</sup>

# Trading Area Analysis and Site Selection

- "Macro-level" broad geographical and economic Areas
- "Micro-level" analysis of a specific trading area or site for a proposed pharmacy

# Trading Area Analysis and Site Selection

- Economic considerations
- Accessibility
- Traffic
- Business neighbors
- Support services

# Economic Considerations

- Ability of the site to support the practice
- Ongoing economic development of the site
- Trends in rent and other occupancy costs, potential for physical growth

# Accessibility

- The population of the trading area must be able to reach the pharmacy
- Existence of natural, manmade, or psychological barriers which would impede access from roadways, major highways, and streets

# Accessibility

- Natural barriers
- Determine the availability of public transit options which consumers may utilize to reach the particular site

# Parking

- Adequacy of parking
- The availability of free parking
- The proximity to the proposed site

# Traffic

- Pedestrian traffic
- Vehicular traffic
- Traffic numbers and patterns in and around the site
- The direction and flow of traffic

# Business Neighbors

- Compatible surrounding retail stores
- Possible competitive situations
- Complementary establishments

# Support Services

- Considerations such as advertising
  - both cooperative and individual
- Special shopping services or promotions
- Availability of supply, and logistical support for the pharmacy operation

# Trading Area Analysis

- The spatial or geographical area
- Dynamic
- Better defined in terms of area instead of lines
- Establishes where the patrons reside and the potential population that may be reached
- Amorphous shapes and variety of sizes

# Trading Area Analysis

- Primary trading area - 50% rule
- Secondary trading area - 90% rule

# Information-Gathering Techniques

- Examine the prescription files or patient profiles of the existing pharmacies to determine where their patrons reside
- Survey the shopping center or area being considered and sample auto license plates to determine the residences of the owners

# Information-Gathering Techniques

- Examine the credit files of existing retail outlets adjacent to the site to determine where the customers live
- Survey shoppers in nearby retail outlets and ask Postal Zip Code

# Spatial Limits

- Geographically describe the trading area
- Evaluate the economic conditions and consumer behavior patterns within that area

# Spatial Limits

- CAUTION:

If the geographic boundaries are changed arbitrarily for any part of the analysis, an essential factor will be altered, inevitably leading to erroneous results

# Subsequent Analysis of the Trading Area

- Utilizes data similar to that gathered during the city-level evaluation
- Purpose is to compile a profile of the area that will enable the pharmacy manager to gain an overall view of the economic potential for his store and the shopping habits of the consumers

# Profile Utility

- Marketing strategy decisions
- Initial location decision
- Evaluate the area
- Determine shifts in the trading area, which might dictate changes in marketing strategy

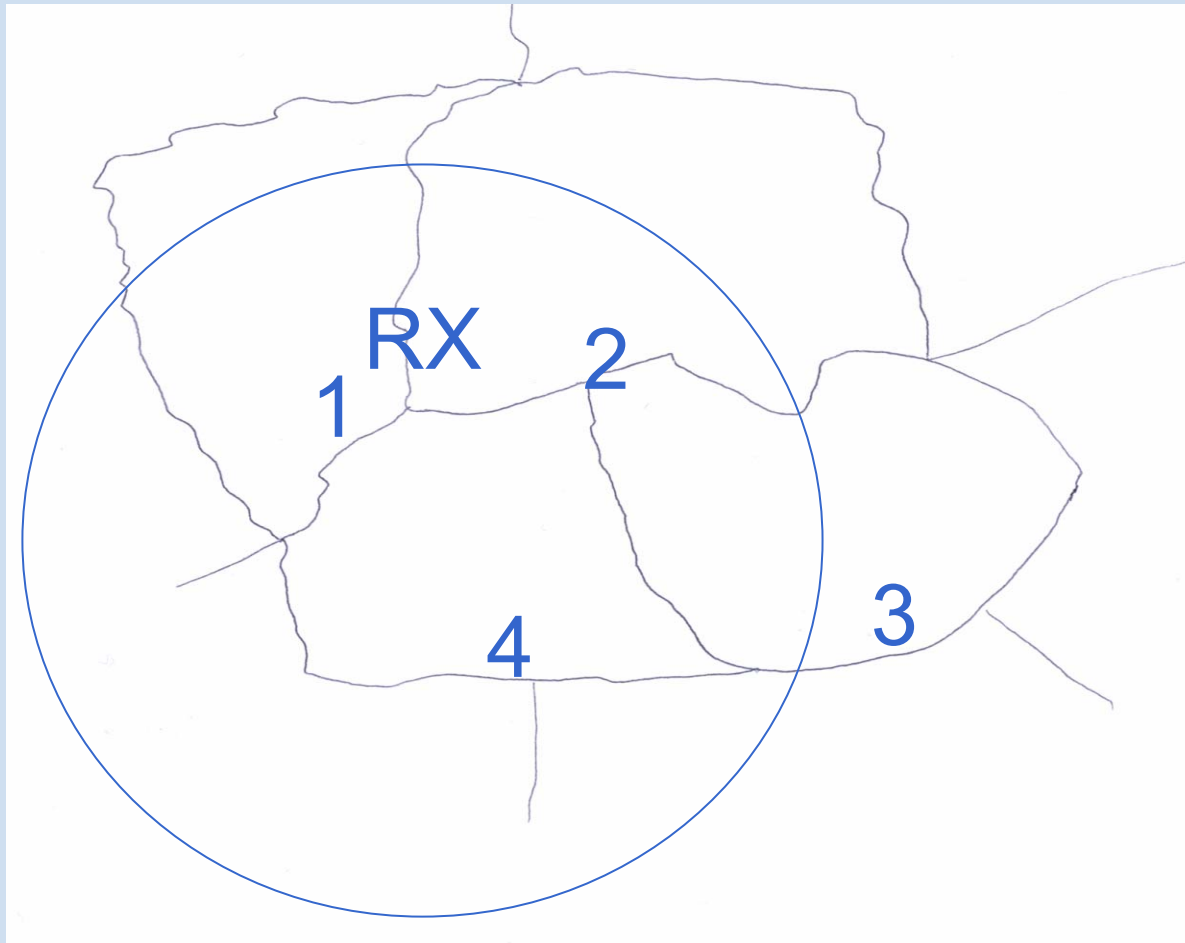
# Methodology

- Obtain census tract maps or other suitable map
- Convert the distance of the trading area's penetration of a census tract into a percentage of the total tract area

# Methodology

- A trading area completely covering a census tract receives a weighting Factor of 100% or 1.0
- A trading area penetrating halfway receives a weighting factor of 50% or 0.5

# Area Map



# Percent Penetration

RX indicates pharmacy location

Area Number:      Percent Penetration:

1                      100%

2                      60%

3                      30%

4                      100%

# Penetration Formula

- Value = 
$$\frac{\text{Sum of (VAR x WF)}}{\text{Sum of WF}}$$
- VAR = the demographic variable
- WF = the weighting factor for each census tracts

# Apply Weighting Factors

- Apply the formula and weighting factors to all those demographic characteristics that are needed to determine the consumer or family profile

# Example

- Age is the study variable
  - (Average age of population in area 1) (1.0) + (avg. age of area 2) (0.6) + (avg. age or area 3) (0.3) + (Ave. Age 4) (1.0) = sum of weighted ages
  - Sum of weighted ages = average age pop  
2.90 in trading area

# A Competitive Profile

- Determined using the same map
- Plot the locations of competitive firms
- Calculate the number of independent pharmacies within the trading area
- The number of chain pharmacies
- The number of health and beauty aid outlets
- Any non-traditional competitor

# Other Variables

- Those affecting the generation of prescriptions include:
  - The number of physicians within the trading area, the number and types of physician specialties
  - The number of hospitals, clinics, medical buildings, and extended-care facilities
  - Each variable can be located on the trading area map using their respective addresses

# Prescription Potential of the Trading Area

- Make a determination of the total amount of money available for prescription sales and retail sales

# Prescription Potential

See Supplemental Materials for this chapter to obtain a copy of these formulas

# Prescription Potential of the Trading Area

- Determine using following data:
  - Total population in trading area
  - Number of families in the trading area
  - Number of physicians located in the trading area
  - Average number of prescriptions utilized per person

# Prescription Potential of the Trading Area

- Determine using following data:
  - Average number of prescriptions utilized per person
  - Average number of prescriptions utilized per family
  - Average number of prescriptions written
  - Average prescription price

# Prescription Potential of the Trading Area

- CAUTION:

Remember the trading area profile provides average dollar figures for the area, not the total dollar potential for the trading area

# Summary of Methodology

- Place the site on the map and draw a circle to represent the trading area
- An estimate is made of the degree to which our trading area overlaps each town (adjust for population cluster or absences)
- Multiply the appropriate demographic variable by the percent in the trading area for each town.
- Carry out this process for each variable & town

# Summary of Methodology

- We now can generate the following:
  - Profile of the average patron in the trading area
  - A picture of the competitive environment
  - Using the above data, we can now generate potential sales in the area

# Summary of Methodology

- Sum the total amount of each variable in the trading area, in this case, total number of families
- Using the same map and telephone directories we can count and plot
  - Potential competitors
  - Physicians
  - Hospitals
  - Non traditional