

# **TOURISM POLICIES AND FASHION, ART AND FOOD INDUSTRIES**

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**Measuring and Forecasting Demand  
and Supply**

**Lecture 10**

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# Learning objectives

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- ✓ Understand the concept of demand and its application and importance in tourism development planning.
- ✓ Become able to apply various methods to measure and forecast demand.
- ✓ Be able to use the mathematical formula to calculate number of guest rooms needed for estimated future demand.
- ✓ Develop ability to perform a task analysis to match supply components with anticipated demand.
- ✓ Discover methods of adjusting supply components in accordance with fluctuating demand levels.

# Relevant demand data

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- Number of visitors
- Means of transportation used by visitors to arrive at destination
- Length of stay and type of accommodations used
- Amount of money spent by visitors

# Demand for a destination

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Demand for travel to a particular destination is a function of the propensity of the individual to travel and the reciprocal of the resistance of the link between origin and destination areas.

***Demand = f (propensity, resistance)***

***Propensity*** depends on:

- Psychographics
- Demographics  
*(socioeconomic status)*
- Marketing effectiveness

***Resistance*** depends on:

- Economic distance
- Cultural distance
- Cost of tourist services
- Quality of service
- Seasonality

# Economic and cultural distance

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- **Economic distance** relates to time/cost involved in traveling from origin to destination and back. ↑ Economic distance = ↑ Resistance.
- Conversely, between any origin and destination point, if travel time or cost can be reduced, **demand will increase.**
  - **Example of measure: Adjusting GDP for the PPP**
- **Cultural distance** refers to the extent to which the culture of the area from which the tourist originates differs from the culture of the host region. ↑ Cultural distance = ↑ Resistance.
  - **Example of measure: power distance, uncertainty avoidance, individualism-collectivism, and masculinity-femininity.**

# Others variables affecting resistance

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- **Cost of services** (i.e. transportation, accommodation, food, etc.).  $\uparrow$  Costs =  $\uparrow$  Resistance.
- **Quality of services** (i.e. the fulfilment of customer expectations).  $\uparrow$  Quality =  $\downarrow$  Resistance.
- **Seasonality** (peaking of tourist demand in a short time window).  $\uparrow$  Seasonality =  $\downarrow$  Resistance.

# Measures of actual demand

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- **Visitor arrivals**

Number of people arriving at a destination who stay for 24 hours or longer

- **Visitor - days or - nights**

no. of visitors  $\times$  avg. no. of days or nights at destination

- **Amount spent**

no. of visitor - days or – nights  $\times$  avg. expenditure per day/night

# Projection methodologies

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Several statistical methods or econometric analysis can be used to project demand:

- Trend analysis method
- Simple Regression: Linear least square method
- Computer simulations and models
- Executive Judgment (Delphi) method



**PAUSE**

# Tourism supply components

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**Can be classified into four main categories:**

- 1.** Natural resources
- 2.** Built environment
- 3.** Operating sectors
- 4.** Spirit of hospitality

# Formula to calculate the number of hotel rooms required

$$R = \frac{T \times P \times L}{S \times N}$$

**T** = number of tourists

**P** = percentage staying in hotels

**N** = total # of guest nights/# of guests

**R** = room demand per nights/#

**O** = hotel occupancy used for estimating; divide number of rooms needed at 100% occupancy by estimated occupancy

**S** = number of days per year in business

**L** = average length of stay

## Example

**T** = 1,560,000 visitors

**P** = 98%

**L** = 9 days

**N** = 1.69

**O** = 70 %

**S** = 365 days

$$R = \frac{1,560,000 \times .98 \times 9}{365 \times 1.69}$$

**R** = 22,306 (rooms needed at 100% occupancy); at 70 % occupancy need

$$R = 22,306 / .70 = 31,866 \text{ rooms}$$

# Task analysis

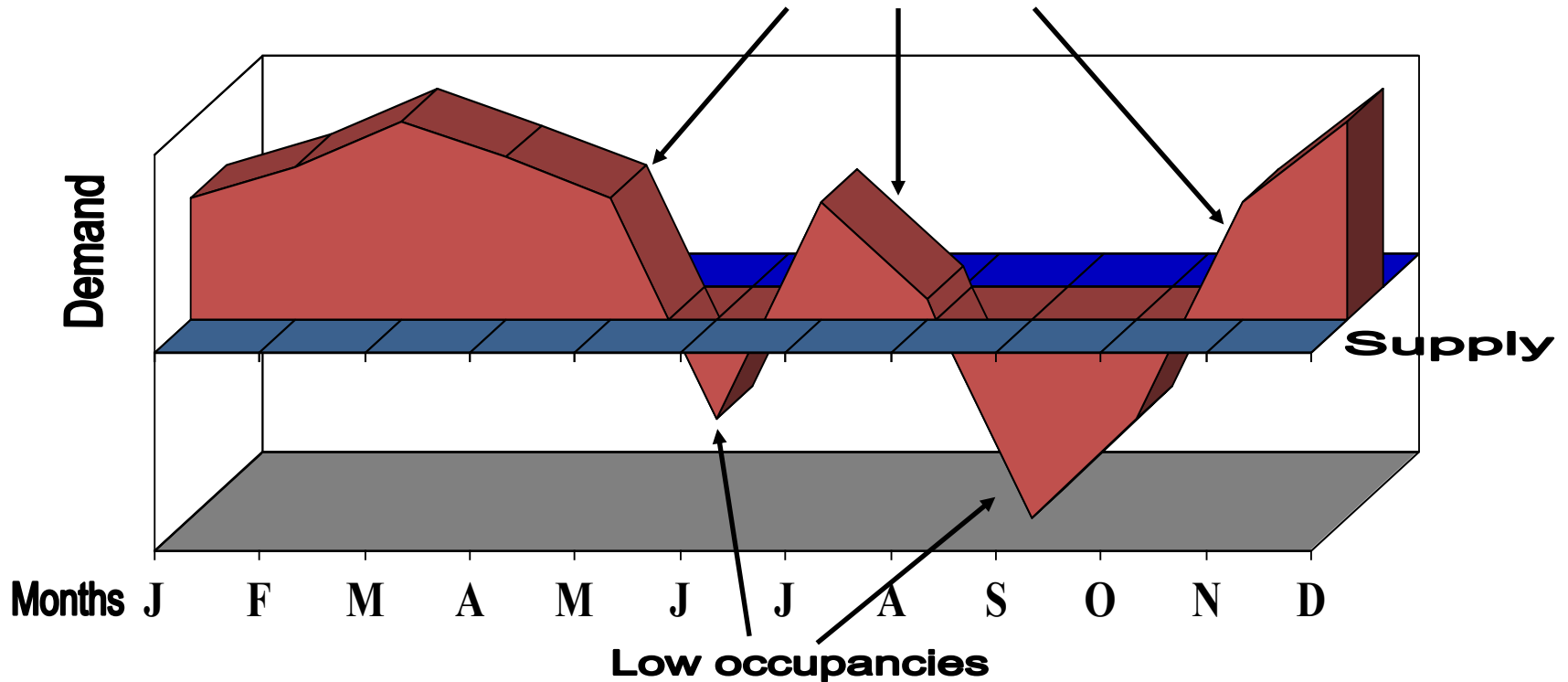
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**Task analysis is the procedure used in matching supply with demand. The following steps are usually employed:**

1. Identification of present demand
2. A quantitative and qualitative inventory of existing supply
3. Adequacy of present supply with present demand
4. Examination of present markets and socioeconomic trends
5. Forecast of tourism demand
6. Matching supply with anticipated demand

# Fluctuating demand levels and supply (SEASONALITY)

**Overcrowding and  
loss potential business**



Seasonality can be reduced through either price differentials or multiple use

# Contacts and office hours

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## Contacts

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## Office Hours

- **Day and time:** Tuesday from 11:00 to 12:00
- **Place:** Room 309, III Piano Palazzo Pacanowski.