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## **E-content**

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## **Concept & Delimitation of Central Business District (CBD)**

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### **Introduction**

Central business district usually referred to as CBD is the heart of a town or city and characterized by maximum accessibility, large shopping and banking areas and government buildings. It is essentially the centre of city's business and civic life. It is normally located at the Centre of the city which is most accessible from all parts of the city in terms of major rail and road routes and forms the chief focus of pedestrian and automobile (vehicular) traffic. In true sense it is the heart of the city characterized by greatest concentration of tallest buildings, highest land value and greatest concentration of offices, commercial and retail stores.

Central Business District (CBD) is also referred by different names e.g. Central Traffic District, Central Commercial District, Downtown Business District, Downtown Trade Zone, Central Transport District, etc. In American cities, it is frequently referred as 'Down Town' while in London it is referred as 'the city'. In Chicago it is called loop.

### **Definitions**

Murphy and Vance (1954)- "CBD is the heart of the city where greatest concentration of offices and retail stores are found reflected in the cities highest land values and tallest buildings. It is also the focus of pedestrian and automobile traffic. By way of the transportation net the remainder of the city and an area of decreasing intensity extending beyond the city corporate limits are oriented towards the CBD".

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G. E. Hartmann – “CBD is the primary focus of internal activities and has the major contact with the tributary area”.

R. E. Dickinson- “The combination of High land value and adolescent buildings, ripe for demolition account for the dingy looking ‘zone of deterioration’ that surrounding the business center of almost every City”.

Harold Carter (1979)- “Central Business District (CBD) is regarded as the organizing centre about which the rest of the city is structured”.

Hari Har Singh defined CBD as the core of the city, characterized by the maximum friction of space, tallest buildings, highest land values and the greatest concentration of pedestrian and vehicular traffic. He further stated, “CBD is the focal point of a city which stands like a spider in the center of the web”.

### **Characteristic Features of CBD**

1. **Maximum accessibility**- Maximum accessibility from all parts of the city is the most dominant factor influencing the character of CBD. This part of the city is most easily reached from the rest of the city as well as easily accessible to the people who lived within city’s sphere of influence. In very large cities CBD is located at the focus of public transport system, near railway terminals. This is so because accessibility from the whole city and its immediate hinterland is particularly important for shops, especially retail outlets like departmental stores and chain shops which attempt to attract a very large number of customers. This type of shops are found on the principal shopping streets.

- Hotels, restaurants, saloons are located in this zone to avail the advantage of large number of customers who comes the city centre for the purpose of buying goods.
- Accessibility is also important for many officers who aim to be reached by a large number of clients.
- Accessibility is also important for the movement of labourers and middle-class workers who come to work in the business

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establishments and retail shops from different parts of the city. Large number of low or middle class workers travel daily from different localities scattered along the periphery of the town. Due to these factors greatest accessibility is the most dominant characteristics of CBD.

2. **Very high land/ rent value** - CBD is characterized by very high land/ rent value. Since the location of CBD is the most advantageous site in terms of intracity transport network, therefore there is great competition among various landuses to occupy this site. As a result very high land values are found at the city centre.
3. **High intensity of Landuse- Tallest Buildings**- Highest land/rent value of the city centre influences the pattern of landuse. Concentration of multi-storeyed buildings are found at the city centre to create maximum floor space vertically. As a result CBD is characterized by tallest buildings. This is another dominant characteristic of CBD which is observed in many of the American cities. Since land/rent value is highest at city centre, the individual retail shops and business establishments occupy small piece of land. This gives CBD a specific three-dimensional quality which is most noticeable characteristics.
4. **Internal Specialization**- CBD is not as entirely homogenous urban region. In fact, internal specialization within city centre is an important characteristic. Each important function develops its own area of concentration. For example, particular types of shops are found in distinctive locations on shopping street. Such as cloth market, vegetable and fruit market, jewellery shops each form their own sub-region of concentration within the city centre. Shopping areas profit from the presence of large number of retail shop outlets in closer proximity to attract large number of customers. Similarly, theatres, cinema halls and other places of entertainment are located close to one another.
5. **Absence of Residential Population**- This characteristic is particularly observed in case of cities of England or America since the city centre which forms the nucleus of city's morphology is generally the oldest part of the city historically. As the number of

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shops increases, land and rent value rises and People can not afford big houses. The large noise and congestion of vehicular and pedestrian traffic during day time also make this area unsuitable for residential purpose.

In India city centre or CBD is not entirely devoid of residential population. Historically the core area develops with commercial and residential land use together. Even after it becomes commercially very congested, people prefer to live in upper storeys of the buildings. Sometimes front location is used for commercial purpose while the back portion is used for residences. This is most common feature of old cities in India which have their origin on the basis of commercial functions.

These characteristics of city centre or CBD makes it the most important zone of the city influencing and controlling the morphological form of the city and its expansion. Since, generally it is the most ancient zone of the city therefore it is responsible for growth and expansion of other parts of the city. Besides this zone is highly dynamic regarding its land use. The old buildings are always in the process of modification, alteration and reconstruction to accommodate for increasing number of commercial outlets. Besides single or double storeyed buildings are converted into multistoreyed buildings. Here it is important to mention that in India CBD is not always the zone of tallest buildings. In most of India multistoreyed high rise buildings are found in the peripheral location or scattered in other parts of the city where land is used for residential purposes.

### **Internal structure of CBD**

Shape and layout of the CBD vary from one town to other. The CBD at Connaught Place (Rajiv Chowk) Delhi has a circular layout of streets. Another commercial zone of Delhi extending from Red Fort to Sadar Bazar is linear in form for a distance of more than 5 kilometres. The CBD of Varanasi is crescent shaped following the course of R. Ganga. In Chandigarh Sector 17 is CBD which has developed a grid pattern of roads. In U.S.A., the CBD of Chicago has the road pattern in the loop form. In Sao Paulo it is triangular in shape. In many cities of India there are more than one nucleus developed during different phases of its growth. For

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example in Delhi, it is Chandani Chowk in Purani Dilli and Rajiv Chowk or Connaught place in New Delhi. Besides several new commercial areas have developed in different parts of the city e.g. markets of Sarojini Nagar, Lajpat Nagar, Karol Bagh, etc. In Patna three separate commercial nucleus have developed during different historical phases. City Chowk in eastern part developed during ancient and medieval period, Bankipore at central Patna developed during British period and New Market near Patna Junction developed during Post-independence period. In all cases it is located at a convenient distance from all parts of the city and has the focus of transport routes e.g. bus terminals, railway stations, etc.

Landuse in the CBD is determined by the pattern of land values. Because of the high land and rent values, around the peak land value intersection only companies with a large turnover and high profits can afford to conduct their business on these prestige sites at the heart of the CBD. Thus, at the core of the CBD, there are departmental stores, major shopping chain, supermarkets and headquarters of offices. Smaller traders with only modest profits are forced out towards the edge of the central area.

### **Delimitation of CBD**

Many attempts have been done to sought a method appropriate for the delimitation of CBD. Many scholars have proposed different empirical and statistical methods and applied their methods on some specific towns.

- 1) R.E. Murphy and J.E. Vance Jr. suggested that land valuation data could provide the most objective and widely applicable method of CBD delimitation. The best means of delimitation is probably based on a combination of land valuation data, if available and land use mapping, whereby the transition from CBD functions to other functional areas of the cities are identified. But Murphy and Vance felt that there are many difficulties in applying land value of a city for the purpose of delimitating CBD.
- 2) William Olsson used the criteria of adopting Shop-Rent Index for the purpose. A shop rent index was derived by dividing the total

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rents for any premises by the frontage. But in this method also some difficulties arise because although rent is a fixed sum, the data are generally not available and are treated as confidential.

- 3) D.T. Herbert proposed a rate index to identify, a part of the towns which might be termed as the core of the central business district. He used the following formula

$$\text{Rate Index (R.I.)} = \frac{\text{Gross Rateable Value}}{\text{Ground Floor Space}}$$

All the above methods were basically based on taking land value as the criteria for delimitation of CBD. In addition to these, other bases have also been suggested from time to time e.g. population densities, pedestrian flows and retail turnovers in the central commercial area.

- 4) Sund and Isachsen studied the dwellings and working places in Oslo. They used the data on total retail turnover or trade.
- 5) M.J. Proudfoot used the 'Volume of Trade Index' for delimiting the CBD of Philadelphia.
- 6) R.E. Bouce and W.A.V Clark have used 'Shape Index' of CBD on the basis of 'Radial Distance Method'. In this method they have taken into consideration the radial distance from the centre of commercial core along the major radial roads. The limit is demarcated by taking the intensity of trade along these roads. The outer limit of the trade area shows the shape of CBD. The value of Shape Index ranges between zero to hundred. Shape Index value 0 indicates circular shape of CBD, while 5 indicates hexagonal shape, 23 indicates rectangular shape. The more higher values indicates rectangular and even elongated shape of CBD.

- 7) Hari Har Singh while studying KAVAL towns have calculated the Shape Index of 5 cities of Uttar Pradesh, India. Accordingly, the S.I of Kanpur is 29.86, Agra 45.31, Varanasi 24.27, Allahabad 74.53 and Lucknow 19.47.
- 8) Kusum Dutta while studying morphology of Indian Cities recognized CBD as an area of specialized districts which can be demarcated on the bases of land value, daytime population and tenure status.

### **Conclusion**

Murphy and Vance also realized that the limit of CBD is never a static boundary rather it is of dynamic and changing nature. Its edges were seen to be either advancing or contracting, and accordingly zones of assimilation and zones of discard were identified. This is the process of change that any CBD experiences. Moreover, every town has its own historical background or physical circumstances of growth. Therefore, local determinants play significant role in the demarcation of CBD. Sometimes physical barriers e.g. marshy land, a lake or river or cultural features e.g. rail lines, graveyard create obstacles in the horizontal expansion of CBD. Thus, it is not possible to apply any method for all towns of world.

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