

# e-Distribution Channels Analysis: A Study of Chandigarh Hotels

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**Abstract:** This study has been undertaken to analyze the usage of e-Distribution channels by hotels in Chandigarh. The main objective of the study is to analyze how the various category of hotels are using e-Distribution and approach toward the same using Online Travel Agency (OTA) and Global Distribution System (GDS). This empirical study was conducted in Chandigarh wherein data was collect from thirty-one hotels in the city. The study reveals that adoption of e-Distribution by hotels is proportional to the star rating of the hotel, wherein Amadeus and MakeMyTrip were most widely used e-Distribution systems.

**IndexTerms** - hotels e-distribution, online travel agency (OTA) , hotels and OTA, global distribution system(GDS), hotels and e-Distribution via GDS, e-Distribution analysis

## 1. INTRODUCTION

India witnessed its first wave of e-commerce evolution way back in the mid nineteen nineties, but it did not really take off due to the absence of clearly-defined business models and the lack of investors enthusiasm. The mid-2000s marked the second emergence of an e-commerce wave in India. India's second wave of e-commerce evolution, in essence, took off with the emergence of low-cost budget airlines and their preference to sell tickets online. The travel segment is, by far, the biggest e-commerce contributor in India. For the hotel industry e-Distribution is the distribution of services offered by hotels electronically.

In the recent years, the development of Internet has grown dramatically. Many countries have made efforts to improve Internet services through wired as well as wireless network. On the demand side, Internet consumer base increase every day. Looking at the facts, it's visible that Internet and Web Technologies are important and becoming a direct marketing tool in the online environment. As the hotels have fixed number of resources which can be booked very much in advance, and to achieve higher yield and stay connected with customers, it's important to use different Internet technologies and tools. Distribution and sale of these fixed resources through the electronic medium is called e-Distribution.

Hotels e-Distribution system is very wide and very effective with the modern system and it is vital to use properly and it's one of the important channels to optimize yield. Modern e-Distribution system includes Global Distribution System(GDS), Internet Distribution Services(IDS), Online Travel Agencies (OTA) and hotel's own website etc. comScore sample indicates that the percentage of consumers consulting online review sites prior to their purchase is increasing with time, and the number of visits per person also has grown noticeably (Anderson, 2012). Hotelier should focus on basic of parameters like robust proprietary website with rich photos, content, videos, multi-lingual resources, enhance training efforts on guest contact area, develop consumer response platform to manage customer review and effectively manage price parity across all online global distribution channels(Mailer, 2011). Room providers should seek to ensure consistent rates across all channels, especially those that are under their direct control (Thompson and Failmezger, 2005) and further states that, the benefit to the hotel from consistent rates are that consumers could spend less time in search mode and confidently book the hotel via any channel, while still being assured of the best rates.

Hotels and hotel chains are using electronic distribution to reduce costs by shifting transactions from intermediaries to their own facilities through direct connections and websites(Carroll and Siguaw, 2003). This saves intermediaries' fees, such as travel-agency commissions of 5 percent to 10 percent and GDS fees of \$3 to \$5 per transaction(Carroll and Siguaw, 2003). Global distribution systems (GDS) such as Sabre and Amadeus have been effective means of communication and inventory exchange between local, national and global suppliers, and the travel agencies. GDS accounts for one-third of all hotel bookings worldwide, and bookings continue to grow. Corporate travel agents have heavily influenced the development of the GDSs given that travel agents are able to control the relationship between the corporations and suppliers served(Gilbert et al., 2004). GDSs are repositioning themselves to become marketing and service companies for their suppliers and subscribers (i.e., other intermediaries, principally travel agencies); changing their focus from airlines to other travel-industry segments; and leveraging their strong near-term cash positions to purchase or partner with other intermediaries to provide end-to-end links between end users and suppliers(Carroll and Siguaw, 2003).

e-Distribution channels are directly linked to sales through electronic medium and it's important to identify and connect with the channels which help to increase direct sales and with best cost-effective manner.

## 2. RESEARCH METHODOLOGY

### 2.1. Population and Sample

Hotels operating in the city of Chandigarh, India are connected with at-least one e-Distribution channel, considering proprietary website is also one channel. There were total fifty registered hotels ( universe of study) having the star rating from two stars to five stars. Based on the above criteria when we applied the logic of at-least connected with one e-Distribution channel finally thirty-one hotels found fit and that is the sample size of the study.

### 2.2 Data and Source of Data

For this study primary data has been collected through questionnaire method. The questionnaire was prepared and pre-tested by taking one hotel from each star rating segment to collect data for pilot study and necessary changes were made to make the final version of the questionnaire.

### 2.3. Theoretical framework

The present study aims at understanding e-Distribution adoption by hotels in Chandigarh city. The various constructs of study are star rating, Global Distribution System, Online Travel Agencies(OTA's). Global Distribution System (GDS) is commonly known as GDS, is distribution system through the computer network with real-time inventory and facilitates transactions between travel industry service providers. Travel agency providing the services to it customers can be online as well as offline. Smooth distributed via electronic medium of hotel room inventory has given opportunities to sell inventory online by travel agencies like MakeMyTrip, Yatra. If a travel agency is operating through online services where guest can book directly via website or mobile application, Its called online travel agency(OTA) and the commonly used term is OTA.

### 2.4. Statistical tools and Descriptive Statistics

Descriptive Statics has been used to find the maximum, minimum, frequency analysis. Cross-tabulation is used to aggregate two or more variables and displaying results in the two-dimensional table. Statistical Package for the Social Sciences (SPSS) has been used a key tool to run various statistical tests including like visual binning to create class interval group, grouping variables in different segments and including the tools mentioned at the beginning of para.

### 2.5. Ethical considerations

For the hotel, information like commission rate for each e-Distribution channel, minimum inventory sale guarantee, whole-seller rates in case of business to business(B2B) transaction, preferred e-Distribution partner with exclusive agreement and premium listing are key parameters which are confidential, Hence they do not want their competitors to know this type of information. For the same hoteliers were assured of privacy on multiple occasion and in this study name of any hotel or the location is not published instead we have segmented by hotel star rating. All the data kept very secretly and not shared between any hotel even for example purpose. To convince hoteliers to provide relevant data, various studies carried out in this regard and best use of the same for the industry was quoted - it has been the key factor to get confidence in them and trust to provide the information.

## 3. ANALYSIS, RESULTS, AND DISCUSSION

### Hotels Rooms and Star Rating

Table 3.1 total rooms by hotels star rating.

Star Rating	Hotel Frequency(%)	Rooms	Rooms Mean	Rooms Percentage
2 star	4(12.9)	50	12.5	3.9
3 star	20(64.5)	628	31.4	48.4
4 star	5(16.1)	316	63.2	24.3
5 star	2(6.5)	304	152	23.4
TOTAL	31(100)	1298	41.87	100%

Source: Data collected through questionnaire  
Data shown in the table within parenthesis is in percentage.

## DISCUSSION AND CONCLUSIONS

Table 3.1 represents the total number of hotels used for primary data collection in Chandigarh and representation by star rating and rooms. The data reveals that there were 20 (64.5%) three-star hotels, 5(16.1%) four-star hotels, 4(12.9%) two-star hotels and 2 (6.5%) five star hotels.

Table 3.1 depicts that majority of hotels belongs to the three-star category and the contribution of hotels in three-star category 64.5%, whereas supply ( room ) side in Table 3.1 depicts that contribution in total room inventory is 48.4%. Four-star and five-star hotels putting together contribute 47.7% in total room inventory, Mainly because four and five-star hotels together have almost equal room supply ( 48.4% - three-star hotels vs 47.7% putting together for and five-star category). Mean of rooms by hotel star rating is increasing with 12.5 for 2 stars, 31.4 for three stars, 63.2 for four stars and 152 for five-star hotels, whereas overall mean is 41.87. It is found that the number of hotels in given star rating is not key parameters to determine the supply side. Few hotels with more rooms inventory can have same or more capacity to accommodate the guest. As mean of rooms increase by star rating, That means at-least in context of Chandigarh higher the star rating more the number of rooms as on average.

It can be concluded that three-star hotels the majority of hotels. Further, it can also be concluded that the five-star hotels are on most lower side with 2(6.5%) representation whereas there is not the much bigger difference between two and four-star hotels with 4(12.9%) and 5(16.1%) respectively.

There is major finding for the reason behind having the majority of hotels in the three-star segment. As Chandigarh is planned city and planning of city put many conditions to get high rise building permission and to maintain symmetry within given area either that is commercial or residential has been key parameters at the time city was planned. As most of the hotels in Chandigarh are in the commercial market space of sectors that and either the hotel or commercial shop all are symmetrical in look and height of hotels. As there is a cap of floors of three ( in maximum cases ) and four in rare cases. The number of rooms cannot be more as the capping of space horizontal as well as vertical. The result is that majority of hotels of three-star segment fall in given room category only. As there is capping of space and because of that hotels can not have additional services which are required for higher to obtain star rating. The result of this most of hotels is in the three-star segment.

### Hotels Connected with Global Distribution System Based on Star Rating

Table 3.2 hotels Global Distribution System connectivity by star rating

Star Rating	Amadeus (%)	Sabre(%)	Galileo(%)	Worldspan(%)
2 star	0	0	0	0
3 star	2(33.33)	0	0	0
4 star	3(50)	2(66.66)	2(66.66)	2(66.66)
5 star	1(16.66)	1(33.33)	1(33.33)	1(33.33)
Total	6 (100)	3(100)	3(100)	3(100)
% Within Hotels	19.35	9.68	9.68	9.68

Source: Data collected through questionnaire  
Data shown in the table within parenthesis is in percentage.

## DISCUSSION AND CONCLUSIONS

From Table 3.2 it can be observed, Amadeus Global Distribution System is more widely used among the hotels which are using Global Distribution System. Amadeus is used twice of any other Global Distribution System used by hotels.

Table also depicts, None of the two-star ranking hotels is using Global Distribution System(GDS) whereas only two three-star hotels are using only Amadeus Global Distribution System, three four-star hotels are using Amadeus and two four-star hotels are using other Global Distribution System as well whereas one five star hotel is using all the Global Distribution System. It may be interpreted as Amadeus is the favorite Global Distribution System among the hotels using Global Distribution System. It has been found that only hotels with larger room inventory are focused on Global Distribution System and some of key reason and findings:

1. As Global Distribution System has fixed transaction fee for any booking passing through GDS system and on the top of that there is travel agent commission. Making it the most expensive channel for the hotels where average daily prices are on lower side.
2. It has been found that the hotels with four and five-star hotels are more interested to connect with this channel despite its expensive for them, the key reason to connect is to attract international guests so they can expect more nights of stay.
3. Also, some hotels have put a minimum length of stay (MLOS) for bookings coming via Global Distribution System to make sure that Global Distribution System fee affordable as the fee is per transaction instead of per night of stay.

### E-Distribution System Connected with Various Star Ranking Hotels

Table 3.3 hotels connected with various e-Distribution channels

Channel	Two star(%)	Three star(%)	Four star(%)	Five star (%)	Total (%)
MakeMyTrip	3 (75)	20 (100)	5 (100)	2 (100)	30 (96.77)
Expedia	0(0)	1 (5)	1(20)	1(50)	3 (9.68)
Yatra	1(25)	10 (50)	5(100)	2(100)	18 (58.06)
GoIbibo	1(25)	10(50)	4(80)	2(100)	17 (54.84)
Cleartrip	0(0)	7(35)	4(80)	2(100)	13 (41.94)
Booking.com	1(25)	5(25)	1(20)	1(50)	8 (25.80)
TravelGuru	0(0)	4(20)	1(20)	1(50)	6 (19.35)
EzeeGol	0(0)	1(5)	1(20)	1(50)	3 (9.68)
Agoda	0(0)	1(5)	1(20)	0(0)	2 (6.45)
IDS	1(25)	14(70)	5(100)	2(100)	22 (70.97)
GDS	0(0)	2(10)	3(60)	1(50)	6 (19.35)

Source: Data collected through questionnaire

Data shown in the table within parenthesis is in percentage.

**Total Distribution Connected With Number Of Channels**

Table 3.4 star rated hotels and connected with the total number of e-Distribution channels

Star Rating	Total Distribution connected with the number of Channels							
	One(1)	Two(%)	Three(%)	Four(%)	Five(%)	Six(%)	Seven(%)	Eight(%)
Two	1(3.22)	1(3.22)	1(3.22)	1(3.22)	0	0	0	0
Three	0	2(6.45)	5(16.13)	7(22.58)	1(3.22)	3(9.67)	0	2(6.45)
Four	0	0	0	0	1(3.22)	2(6.45)	1(3.22)	1(3.22)
Five	0	0	0	0	0	0	1(3.22)	1(3.22)
Total	1(3.22)	3(9.67)	6(19.35)	8(25.80)	2(6.45)	5(16.12)	2(6.44)	4(12.89)

Source: Data collected through questionnaire

Data shown in the table within parenthesis is in percentage.

**DISCUSSION AND CONCLUSIONS**

Table 3.3 depicts, MakeMyTrip (MMT) is widely used e-Distribution system overall. MakeMyTrip is used by 96.77% of hotels. MMT used by 75% two-star hotels and by all three, four and five-star hotels. IDS is the second most used e-Distribution system, which is used by 70.97% of hotels. IDS used by 25% two-star hotels, 70% three-star hotels and 100% by four and five-star hotels. Yatra and GoIbibo are third and fourth most used e-Distribution channels used by hotels and by usage both are used by hotels with the ratio of 58.06% and 54.84% respectively. Yatra used by 25% two-star hotels, 50% three-star hotels, all four and five-star hotels. GoIbibo is used by 25% two-star hotels, 50% three-star hotels, 80% four and by all five-star hotels. Agoda is least used e-Distribution channel by hotels as it is used by just two (6.45%) hotels. Second least used e-Distribution channels are EzeeGo1 and Expedia, As in both cases used by three (9.68%) hotels only. Both EzeeGo1 and Expedia are used by 5% three-star hotels, 20% by four-star hotels and also by 50% five-star hotels. Global Distributed System is the affordable and important channel for four and five-star category.

Table 3.4 represents that only four hotels are connected with eight e-Distribution channels, two hotels with seven e-Distribution channels, five hotels with six e-Distribution channels, two hotels with five e-Distribution channels, and the highest eight hotels are connected with four e-Distribution channels, followed by six hotels with three e-Distribution channels, three hotels with just two e-Distribution channels and only one hotel with one e-Distribution channels. The 22.58% of hotels are connected with four e-Distribution channels only making it highest among all hotels segment and only one hotel is connected with just one e-Distribution channel only and making this hotel the least electronically distributed hotel.

**4. RECOMMENDATIONS**

A few hotels are solely focused on either one or two e-Distribution channel. It will be productive in the long run if they can connect to more than two channels, and not to depend on just one or two e-Distribution channels. Hotels that are listed on third-party distributors' websites, commonly known as online travel agents (OTA), gain a reservation benefit in addition to direct sales. That benefit often called the billboard effect, involves a boost in reservations through the hotel's own distribution channels (including its website), due to the hotel's being listed on the OTA website (Anderson 2009).

Purpose of e-Distribution should not be just to sell the room. Listing on e-Distribution impact sales through the non e-Distribution system as well (Andreson, 2009). e-Distribution should be used for market segmentation. The hotel using Priceline(Booking.com, Agoda.com) will have higher possibility to get bookings from many different markets as Priceline is global OTA. If hoteliers are connected with Yatra.com, there is the possibility to get the majority of bookings from Indian market only because Yatra.com is the OTA operating and focused in India. So there exist the market specific e-Distribution systems and if hotels wish to focus on some specific market, they can tie up with e-Distribution channel more important in that market like Ctrip in China, Expedia, and Booking.com in the USA etc.

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