Global Distribution Systems (GDS)

https://skift.com/2017/08/07/channel-shock-the-future-of-travel-distribution/

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LEARNING OBJECTIVES

- Understand the significance and functions of GDS

- Get insight into the historical development of GDS systems

- Gain understanding of the relationship between CRS and GDS

- Acquire knowledge on the driving forces of GDS

- Know the relevance of HDS (Hotel Distribution System) to the Hoteliers.

History and Evolution of Global Distribution System

- There have been 3 stages of evolution the first reservation system was called an

- Airline Reservation system,

- the second a Computer Reservation System (CRS) and

- The third evolution is today's Global Distribution System (GDS).

History and Evolution of Global Distribution System

- Global distribution systems (GDS) have evolved from the first computer-based reservation systems implemented by several U.S. airlines in the late 1960s.

- However, there are several key milestones and technological innovations worth highlighting.

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Stage 2 (1960s)

- American Airlines (AA) was the first company to develop a real-time computerized reservation system. In a joint venture with International Business Machines (IBM),

- The Semi-Automatic Business Research Environment (SABRE) was launched in 1964 and

- Helped American process nearly 26,000 reservation requests per day (Sabre Travel Network History, 2004).

Stage 3 (1970s)

- In the late 1960s and early 1970s, virtually all of the major carriers, including United, TWA and Delta were operating their own central reservation systems (CRS).

- It was not, however, until 1976 that these systems were installed in travel agencies, allowing agents to both book and change reservations directly in the system using remote access terminals.

- Clearly, the ability for airlines to operationalize their booking systems in geographically dispersed markets was a major competitive advantage for those who participated (Sabre Travel Network History, 2004).

Stage 4 (1980s)

- The distributed system was paralleled by increases in computing and storage power;

- During 1980, SABRE was available in over 130 locations and could store 1 million airfares.

- After The Societe International de Tele-communications Aeronautiques (SITA) is also outlined,

- which supplied telecommunication services to several of the GDSs and other travel and tourism organisations (Sabre Travel Network History, 2004)?

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Stage 5 (1990s)

- Amadeus Global Travel Distribution was formed in 1987, with each of the four European airlines Air France, Iberia, Lufthansa and SAS Scandinavian Airlines System

- The Amadeus Central System was based on the software of the reservation System and located in Erding near Munchen in Germany.

- The system became operational in 1991, integrating the four national reservation systems Esterel in France, Savia in Spain, Smart in Sweden and START in Germany,

- Amadeus operated on its own network Amanet, on various national networks and on the global SITA network

- In 1994, claimed to have Europe's largest civilian database.

# History and Evolution of Global Distribution System
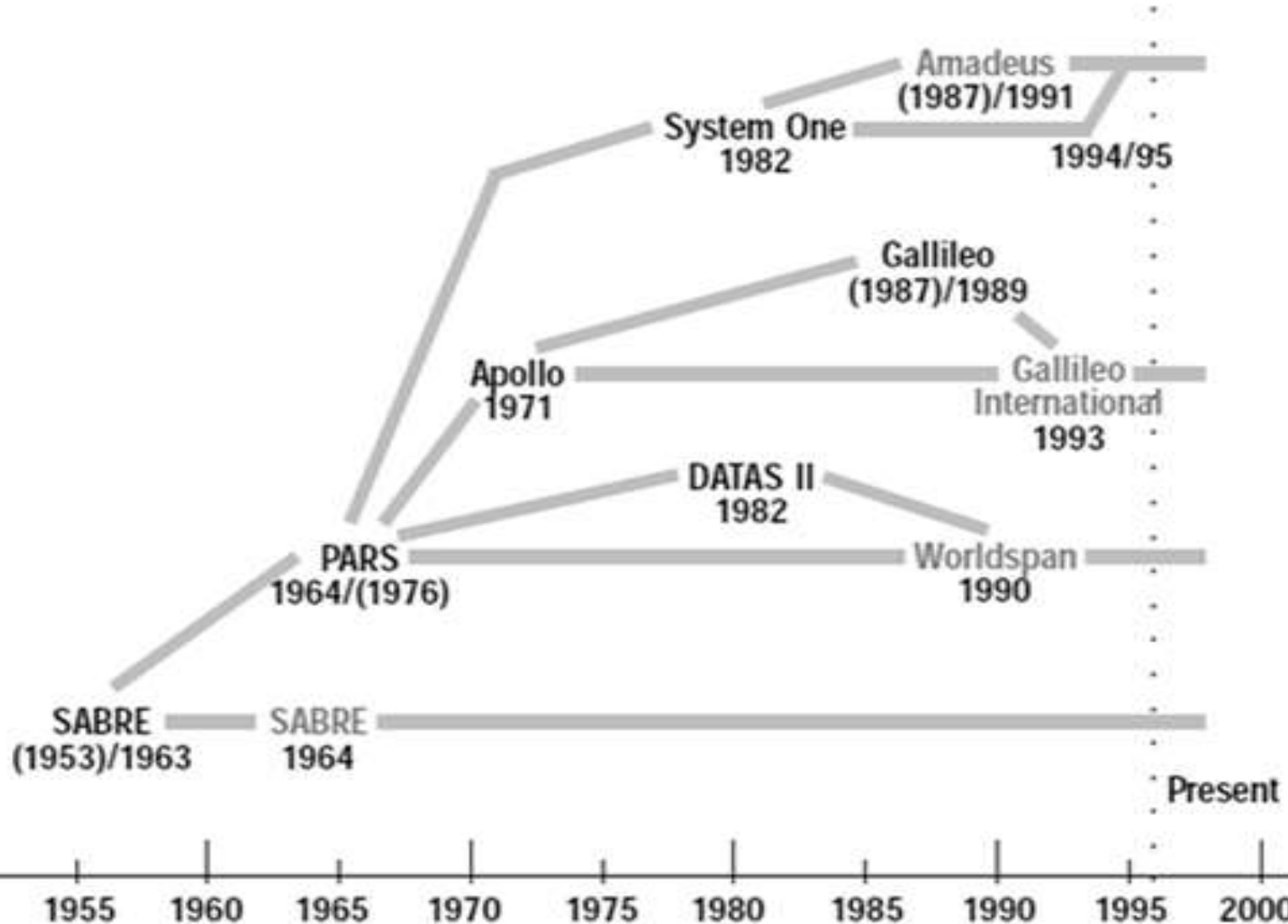
- The emergence of electronic median into Indian markets during 1990s.

- Dawn of the Internet in e-commerce during the beginning of the 20thcentury.

- But in fact, internet commerce in tourism and travel had already experienced the "dot-com" explosion even in the beginning of 1970s in the and slowly become common platform during the late 1980s.

- The information technology and systems powered electronic version of travel industry with the origination of CRS (Computerised Reservation System).

- Later, after a decade the CRSs got transformed into GDS (Global Distribution System).

GDS Vs CRS

- CRS and GDS have been acting as the driving force of tourism and hospitality industry across the world.

- These systems play significant role in driving the tourism consumption at the global stage.

- GDS is different from a Computer Reservation System which is a reservation system used by the respective vendors.

- Primary customers of GDS are travel agents (both online and office based) to make reservation on various reservations systems run by the vendors.

- It is important to note that GDS holds no inventory, the inventory is held on vendors' reservation system itself.

- A GDS system will have real-time link to the vendor's database.

- CRS and GDS seem to have the same functions but the major difference between these two systems is that GDS only provide information about airlines whereas by using CRS you can reserve a ticket, a room in a hotel and also a rental car.

- For example, when a travel agency requests a reservation on the service of a particular airline, the GDS system routes the request to the appropriate airline Computer Reservation System.

- This enables a travel agent with a connection to a single GDS to choose and book various flights, hotels, activities and associated services on all the vendors in the world who are part of that GDS.

Understanding Global Distribution System
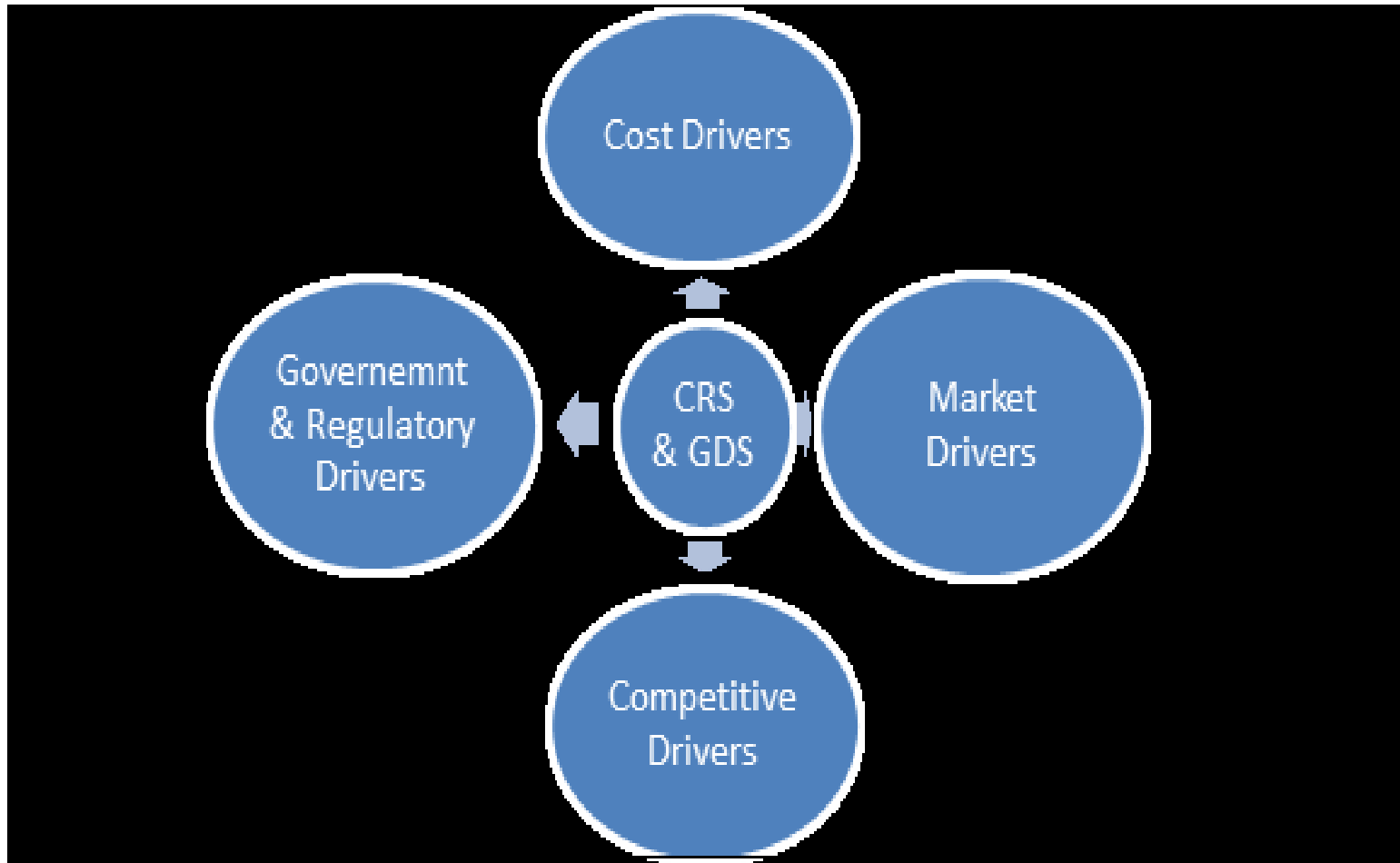
Driving forces of GDS and CRS at Global stage

Cost drivers	Market drivers
• Increase efficiency • Low distribution cost • Low communication cost • Low labour cost • Minimisation of waste factor • Facilitator of flexible pricing	• Satisfy sophisticated demand • Flexibility in time of operation • Support specialisation and differentiation • Provide last minute deals • Accurate information • Support relationship marketing strategies for frequent flyers/guests • Quick reaction to demand fluctuation • Multiple/integrated products • Yield management • Corporate intelligence • Marketing research
Government and regulatory drivers	**Competitive drivers**
• Deregulation • Liberalisation • Government supported	• Managing networks of enterprises • Value-added skill building • Flexibility • Knowledge acquisition • Strategic tool • Barrier to entry

Functions of Global Distribution System (GDS)

- a. **Product Presentation**

- b. **Reservation**

- c. **Fare Quote & Ticketing**

- **d. Additional Services**

Conti….

GDS companies offer far more than just simple air travel bookings. GDS systems are capable of booking:

➤ One way and roundtrip airline seats	➤ Hotel rooms
➤ Rental cars	➤ Tours and packages
➤ Cruises	➤ Insurance
➤ Restaurant reservations	➤ Theatre tickets
➤ Itinerary changes	➤ Complex international routings
➤ Rail	➤ Ferry
	➤ Limousines

Hotel Distribution System

- The HDS (Hotel Distribution System) involves tries to provide direct access to the customers to ensure lower cost.

- Currently the Hotels try to own internet based and self owned distribution system through they provide information, and book reservations for the customers directly instead of going through Online travel agent or GDS.

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Why HDS…?

- Update the room availability, rates, special packages and any other hotel information to engage potential customers.

- Room types, rate plans, special offerings, room descriptions and booking/cancellation policies have a direct impact on the number of reservations your hotel receives.

- Therefore, a thorough consultation on these aspects with the Support Team is vital for setting-up and implementing HDS Connect.

Process and structure of Hotel Distribution System

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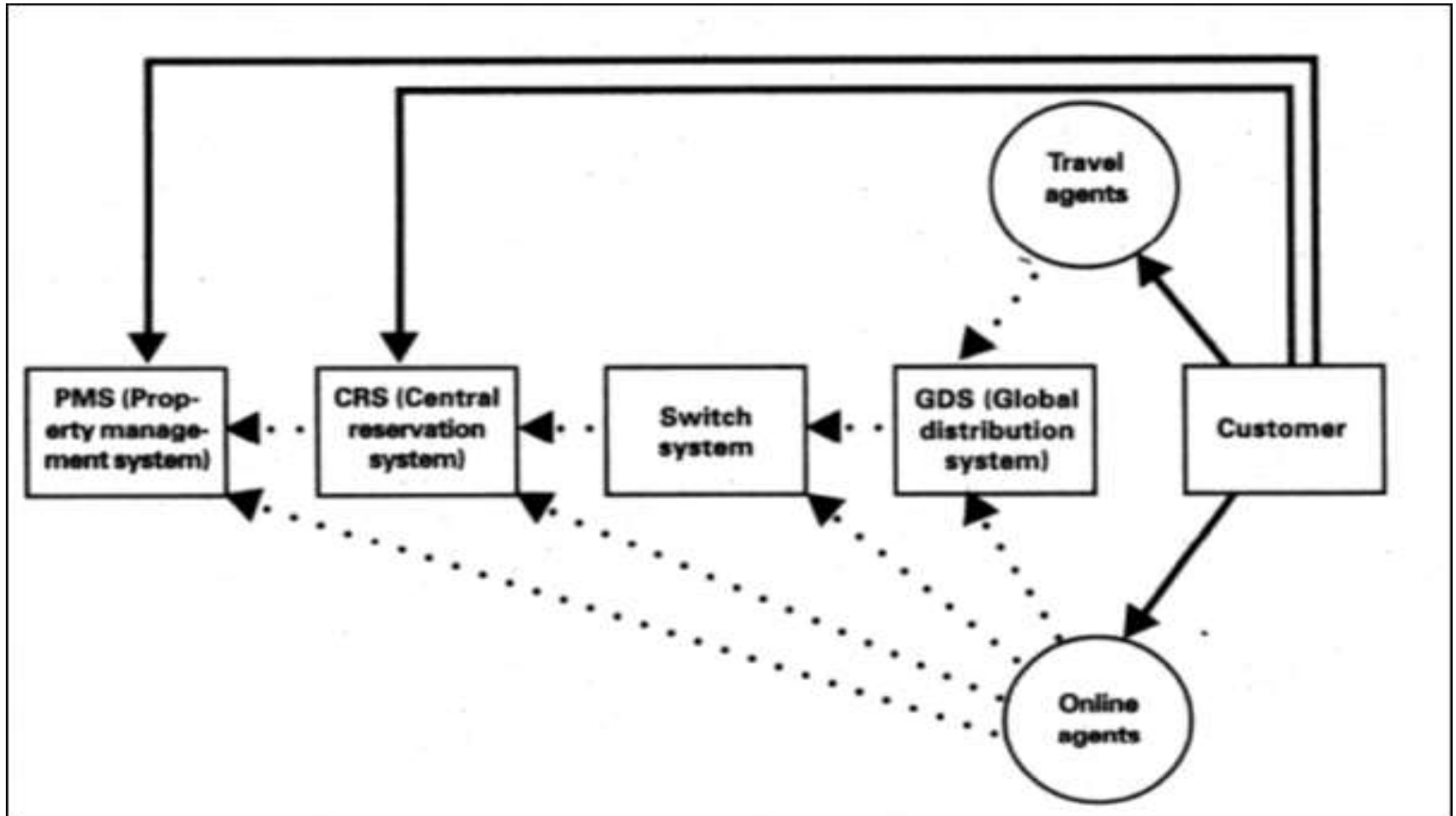
HDS to GDS

HDS to GDS to OTA

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[GDSs](#) used across the world

- 1. Amadeus,

- 2. Sabre,

- 3. World span,

- 4. Abacus and

- 5. Galileo.

CASE 1: AMADEUS

- **Overview of Amadeus**

- Founded in 1987 by Air France, Iberia, Lufthansa, and SAS, Amadeus is the youngest of the four GDS companies.

- Amadeus is a leading global distribution system and technology provider serving the marketing, sales, and distribution needs of the world's travel and tourism industries.

Conti…

- Largest of their kind in Europe,
- Serve more than 57,000 travel agencies,
- More than 10,500 airline sales offices in some 200 markets worldwide.
- The system can also provide access to approximately 58,000 hotels.
- 50 car rental companies serving some 24,000 locations.
- Provider groups, including ferry, rail, and cruise, insurance, and tour operators.

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Corporate Preview

- Upon its inception, Air France, Iberia, Lufthansa and SAS held equal shares of Amadeus Global Travel Distribution S.A. Shortly after the formation of the company,

- However, SAS sold its shares to Amadeus Data Processing.

- The three founder airline shareholders currently hold 59.92% of the company: Air France (23.36%), Iberia (18.28%), and Lufthansa (18.28%). Remaining shares are held publicly(Das 2009).

- The Amadeus group has three primary corporate headquarters. Their **data processing division**, **product research** and **development division** and the official corporate headquarters are located in three different regions of Europe (Amadeus 2009).

Products and Services Offered

- **Travel Providers**

➢ Airlines: network airlines, regional airlines, low cost and leisure carriers

➢ Hotels: chains, representation companies, and independent hoteliers

➢ Ground & Maritime: car rental, railway, ferry, cruise and insurance companies

➢ Tour operators: specialty, mass-market and vertically-integrated tour operators

Conti….

- **Travel Sellers**
➢ Travel Agencies: including travel management companies, business and leisure travel agencies of all sizes, online travel agencies and consolidators

- **Travel buyers**
➢ Corporations: self-booking solutions for companies looking to maximise value from their travel spend.

➢ Travellers : trip planning and checking through amadeus.net and Amadeus checkmytrip.com

| Flights | Hotels | Cars | Trip tools | Activities |

This application allows the customers to find flight availability, flight timetables and flight status

This application enables the guests to find the best hotel rates among 400 different destinations.

This application gives the clients the best car rent rates among where and whenever they want to be picked up.

Amadeus Web Link- Example of Customer services

Source: Amadeus (2009)

AMADEUS - HOMEPAGE

Competitive Strength

- Amadeus has an advantage over the other systems because of having access to the most travel agency sites.

- Also the Amadeus system has the most productive system platform in the world.

- In July 2011 Amadeus has purchased e-Travel, Inc.

- At the same time the company has made the business unit and this unit is working through e-Travel to give more business to corporate clients ([Amadeus 2009](#)).

CASE 2: Galileo (Travel port)

Overview of GALILEO

- **Galileo** is a computer reservations system (CRS) owned by Travel port

- Galileo began in 1993, when British Airways, KLM (a Dutch airline) and United joined forces to create a computer reservation system.

- It was founded 11 major North American and European airlines: Aer Lingus, Air Canada, Alitalia, Austrian Airlines, British Airways, KLM Royal Dutch Airlines, Olympic Airlines, Swissair, TAP Air Portugal, United Airlines, and US Airways.

- Galileo International was born when Covia acquired Europe's Galileo and merged it with the Apollo system in 1992.

- The Galileo system was moved from Denver, Colorado, to the World span datacenter in Atlanta, Georgia, on September 28, 2008, following the 2007 merger of Travelport and Worldspan (although they now share the same datacenter, they continue to be run as separate systems).

Corporate Preview

- Galileo is owned by Travel port, an international company headquartered in New York.

- Currently, the company is represented in 116 countries, and serves travel agencies at approximately 45,000 locations.

- Other travel suppliers include 500 airlines, 227 hotel companies, 33 car rental companies, and 368 tour operators.

Products & Services

Galileo Desktop 2.0	Galileo Desktop is a sophisticated global reservation, business management and productivity system.
Galileo e-Tracker	A simple to use, web-based tool that enables agents to check all electronic tickets issued via Galileo.
Travel port Smart point	The latest version of Travel port's point and click technology. It evolves the Galileo Desktop with dynamic and interactive technology that improves travel agents productivity and customer service.
Travel port View Trip	A comprehensive online travel resource providing agencies and their customers with direct access to their own personal travel itinerary, electronic ticket records and electronic expense receipts, including the ability to retrieve, review, print and e-mail data from any internet-enabled location.
Galileo Integrated Data Source	is a structured data stream which collects core PNR data from the Apollo and Galileo host systems to enable customers to manage pre and post trip reporting to effectively control travel budgets and business operations.

Travel port e-Pricing	Technology has revolutionized the worldwide travel shopping experience. It is built upon the first multi-server based shopping technology in the global distribution system (GDS) industry. It allows travel agencies, corporate travel buyers and online shoppers to shop, price and book low fares faster and more accurately than ever before.
Travel port Rapid RE price	Automates the complex itinerary re-pricing function allowing agents to efficiently re-price a ticket in a matter of seconds. The whole process of locating original ticket data, interpreting and applying fare rules correctly, building new fares and exchanging the tickets is automated.
Automated Exchanges and Refunds (ARNE)	Fully automates ticket exchanges and refund calculations. Validates change penalties and change fees.
E-Learning	Designed for busy professionals with comprehensive information about Ticketing solutions Focal point Shopping, hotel bookings, car rental or any other related services. Equip you with everything you need to know about ticketing solutions,
Galileo Custom Check	A proven quality control solution that comes into play at the point of sale, ensuring that your bookings adhere to corporate or agency policies – prior to ending a transaction and ticketing. Custom Check is available to subscribers of the Galileo and Apollo global distribution systems (GDS).
Galileo Web Services (GWS)	An application program interface (API) that enables customers to build an interface such as a website, connected to the Galileo GDS. Through GWS, travel companies can easily integrate Galileo travel content with their own systems to create their own website and grow their business.

Competitive Strength

- Galileo's competitive strengths include :
- market share, Worldwide Market Share 22%
- well-balanced and global presence, relationships with diverse groups of travel vendors,
- technologically advanced
- information systems,
- highly skilled personnel, and
- a stable product line.
- It has a state-of the-art development centre supplying information and systems support to travel agencies operating more than 178,000 computer terminals.