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Practice: Marketing & Technology

Topic: Electronic Distribution

The Hotel Distribution Workhorse

A second generation hotel distribution technology still working hard in a fifth generation world...



By Mark B. Hoare

Commercial grade Hotel Electronic Distribution has been with us for over twenty five years. During that time we have witnessed numerous distribution technology innovations come and go.

However, some found their niche and are still firmly embedded in our industry in the form of business critical distribution solutions that enable commerce to flow back and forth electronically between suppliers & distributors, and more recently suppliers & consumers. Amongst all of these, is one unsung hero that has spanned almost this entire quarter century and, as a testament to its original design, builder and market relevance, continues to this day to be the hotel industry's electronic distribution connectivity Workhorse.

Throughout its existence it has had only one credible competitor and a few flash-in-the-plan upstarts to challenge its position of dominance. This Workhorse is the UltraSWITCH.

The statistics attributable to the UltraSwitch are truly astounding... but more on those later. For now let's step back to 1988 when it was simply a technical concept and a handful of business requirements sitting on a design table in Phoenix, Arizona.

The term once-in-a-blue-moon comes to mind when recalling how the UltraSwitch was conceived. It was driven by the force of common commercial need across multiple companies [most of them direct competitors] at the same point in time. For the UltraSwitch the primary collaborators were made up of a splinter group who had elected not to participate any further in the CONFIRM¹ project. [A smart move, some would say in retrospect].

Bill Watson, Sheraton's VP & Director of Rooms and Reservations at the time, recalls, "A few hotel chains who elected not to participate further in CONFIRM had an informal meeting after withdrawing and agreed that the concept had real merit and decided

¹ CONFIRM – An ill-fated project initiated by American Airlines and Sabre with the same cooperative objective of creating a single reservations pipeline for the hotel industry.

to continue talking about the topic, for which we needed a vehicle or forum moving forward. So we created the Hotel Booking Research Association and started to meet monthly. It quickly became apparent that while the concept was great on paper there were numerous legal, commercial and technical challenges to be addressed not the least of which was antitrust laws about competitors collaborating around a switch which, amongst other things, dealt with prices”.

Despite these initial challenges the simple fact remained that there really was no sense at all in numerous hotel companies continuing to invest in writing, developing and maintaining their own separate connections to the [then] five primary Global Distribution Systems [GDS].

Just to clarify, the technical ability to have a direct interface between a GDS and a hotel Central Reservation System [CRS] did already exist. For example Utell, an hotel representation and marketing company, had already invested in a direct connection to the Sabre GDS in 1988 using Sabre’s proprietary interface specification over an X.25 connection, [debatably a First Generation hotel distribution technology].

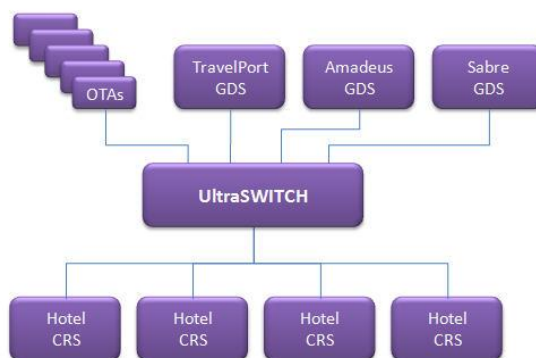
Motivated, aligned and funded, this collective of hotel companies, together with their huge publishing partner [Reed], recognised the need to form a discrete not-for-profit business entity that would operate under their auspices. Shortly after, The Hotel Industry Switch COmpany [THISCO] was formed to deliver this new and pioneering hotel industry Switch.

There is little doubt that THISCO amassed a great deal of industry talent around them early on, and to this day it is still amusing to hear how many industry players claim to have *created* the THISCO/Switch...

perhaps even more than have claimed to have invented the Internet.

Possibly the smartest decision THISCO made at the outset was to engage Anasazi, Inc. as their technology development partner. Anasazi’s technical talent was world class and thought-leading. They knew immediately that if this Switch was to sustain the exponential growth of transactions projected to pass through it, it needed to be technically robust, and built for speed not comfort.

So what does the UltraSwitch do, and how does it work? Answering these questions may provide insight into why, into its third decade of operation, the UltraSwitch is still retains a good degree of its former relevance.



In its primary role, the UltraSwitch enables the Global Distribution Systems [now Sabre, Amadeus, and TravelPort] to interface electronically to the industry’s abundant supply of hotel Central Reservation Systems using a single

interface specification developed by Anasazi on the hotel side, and separate proprietary interface specifications to each of the GDS’ on the distribution side. This served to address the completely different technical message protocols in use by each of the GDS’ and the CRS’.

Initially, designed to support Booking Delivery messages and limited Brand and Property Information messages, the UltraSwitch was later enhanced to support; Seamless Booking and Availability inquiries [Single Property searches], Rate Rule inquiry messages, and was most recently enhanced to support the GDS’ Next Generation Seamless availability inquiries [Multi-Property searches].

At its heart also lies a collection of cross-reference tables that address the GDS and hotel CRS use of

disparate codes for Room Types, Rate Plans, Property Codes, Chain Codes, etc. More subtle, but never-the-less important, was also the inconsistent business logic between the GDS and the CRS... another challenge that the UltraSwitch competently took on board.

In 1989 the UltraSwitch was off to a very positive start with more and more hotel brands lining up for electronic GDS connectivity through The Switch.

In the mid-90's UltraSwitch's responsibility was expanded to also act a switching connectivity solution between the hotel CRS' and the newly emerging internet hosted distribution portals.

This opened the door to Online Travel Agencies [OTAs], such as Expedia and Hotwire, signing up to take advantage of the Switch too. There followed many more OTA's over the next several years all availing themselves of this 'connect once – reach many' service. This gave rise to the phenomenon known as The Network Affect². Good times!

However, this was perhaps an unseen turning point for the Switch as it had been initially designed and onwardly enhanced to closely align with the way in which the GDS' traditionally transacts electronic business with hotel CRS'.

In contrast to the GDS' these newer OTAs were open to much more; capacity, creativity and diversity in terms of their business models and technology platforms. The most notable difference to the GDS' could be seen in those OTA's that operated with their own Inventory and Rate databases [something the GDS' abandoned along with the advent of their Next Generation Seamless functionality]. For these OTAs sending an availability and rate inquiry to the CRS and selling a room based on the products returned in the CRS response provide by the UltraSwitch, did not work for them. Somehow their

² The Network Effect. The larger the relevant Distribution opportunities for Suppliers became, and the larger the relevant Supplier choice for the Distributors became, the faster the pace of access subscription grows on both sides.

databases had to be stocked with up-to-date hotel inventory and rates, but the interface messages required to do that were not, and are still not, supported by the UltraSwitch.

Over time, those OTAs who absolutely needed their own databases of availability and rates forged direct connectivity relationships with hotel companies and, because of their size, were able to persuade the those hotel companies to develop and deploy direct connect XML interfaces that supported the required [Push] messages needed by the OTA's business and technical models.

A few larger OTAs tried to avoid the reality of having to invest heavily in their own direct 'Push' connections to all the hotel's CRS', and resorted to Bursting many tens of thousands of availability inquires [that routed through the Switch] over and over again so they could scrape the results into their own caches and databases. This was quickly prohibited as although the UltraSwitch could accommodate these huge volumes of transactions, the hotel CRSs could not.

Even those OTA's that were not Bursting ushered in a new era of ever increasing Look-to-Book³ transaction ratios, especially the Travel-Search sites.

Some of these regularly generating in access of 3,000:1 Look-to-Book ratios.

Despite the turmoil brought about by the Internet's paradigm shift in electronic distribution, the UltraSwitch has endured.

This seems an appropriate time to get back to those astounding statistics. Since its inception in 1989 the UltraSwitch has worked tirelessly 24/7/365 for over twenty years. In a recent publication put out by the UltraSwitch's owners it was stated that the Switch is now processing 40 billion transactions per year [or an average of 1,300 transactions per second], and

³ Look-to-Book ratio – For a given period, the number of Availability/Rate inquiries handed per actual Booking made

also that 2.8 billion availability inquiries were handled in the single month of July 2009. It also states that Internet channels are currently generating an average 1700:1 Look-to-Book ratio. Added to that, The Prism Partnership estimates that the UltraSwitch may still be facilitating the electronic delivery of well over 10 billion dollars of room revenues to the hotel industry per annum.

UltraSwitch is without question a business critical... no, *industry critical* solution that even today continues to be the backbone of hospitality electronic distribution. For over 20 years it has assiduously toiled away facilitating electronic commerce between hotel supply and demand.

So what of its future?

While still providing a reliable and relevant connectivity solution out to the GDS' [its original mandate], there is little doubt that its future will be less triumphant. This is due to several key factors.

Firstly the big internet distributors [Expedia, Hotels.com, Priceline, Travelocity, Orbitz, Opodo, Booking.com, etc] have forged, or are forging, their own direct-connect solutions to CRS [and now PMS] platforms. All made possible by the advent of more openly available and economically deployed XML interfacing standards. Standards such as those produced by Open Travel [OTA], HTNG and even pre-packaged [Push] messages suites such as FastRez recently created and offered by Open Travel.

Secondly, the GDSs too are taking advantage of these relatively new XML interfacing standards, each now having an alternative XML interface connectivity option for those hotels and hotel representation companies that wish to build and deploy their own direct-connect interface without the enormous, multi-million dollar, overhead of writing to their legacy EDIFACT based interfaces.

The third, and perhaps the most significant limitation of the UltraSwitch in this evolved world of hotel electronic distribution, is centered on it not supporting the Push model.

In spite of its diminishing relevance the UltraSwitch continues to play an important role in hospitality electronic distribution. If it were to go away tomorrow, for whatever reason, it would undoubtedly be an industry event of momentous proportion.

After reading this I hope you agree that the UltraSwitch is indeed an under-sung hero in the hospitality industry, and while more and more opportunities emerge for Supply and Demand partners to forge ahead with economic, reliable and functionally rich direct connections, the UltraSwitch is still a noteworthy workhorse.

In fact, if the HFTP were to extend out their annual Hall of Fame award to include noteworthy hospitality Technologies, as well as noteworthy hospitality Professionals, the UltraSwitch would certainly be up there amongst my top three nominations. ■

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