The trend of multisided platforms (MSPs) in the travel industry: reintermediation of travel agencies (TAs) and global distribution systems (GDSs)

Suhaib Aamir and Nuray Atsan

Abstract

Purpose – *The purpose of this paper is to shed light on the remarkable trend of multisided platforms (MSPs) in the travel industry with the help of which travel agencies (TAs) and global distribution systems (GDSs) can reinforce their intermediary roles. Orthodox TAs face the threats of disintermediation because of the ever faster-changing developments in information and communication technologies, such as the emergence of metasearch engines, online travel agencies, direct bookings on airline websites and the widespread of mobile applications for travel related bookings. GDSs face similar threats of disintermediation from low-cost carriers and legacy carriers, as these carriers promote and encourage direct bookings via their official websites or via the new distribution capability.*

Design/methodology/approach – *This is a casestudy-oriented research, and the case selected is a MSP based in Turkey. The data are gathered using semi-structured interviews conducted from 15 international representatives of this MSP in different countries. Interviews were conducted either physically at the MSP's headquarters in Antalya, Turkey, or virtually using Zoom application from January to October 2019.*

Findings – *The paper portrays the significance of MSPs in terms of their contributions toward the reintermediation of the two important intermediaries, namely, TAs and GDSs in the travel industry supply chain. Both of them are prone to the dangers of disintermediation because of the developments in technology, networking and communication channels; the worldwide accessibility of the stakeholders to the internet; and the direct reach of suppliers to consumers. The deteriorating role of TAs and GDSs is reignited by the successful launch, deployment and adoption of MSPs in the ecosystem of the travel industry.*

Originality/value – *This paper offers an insight into the prevailing trend of MSPs in business to business (B2B) trading from the perspective of two main intermediaries, TAs and GDSs, in the supply chain of the travel industry. The paper in a novel way compiles the data from the interviews to shed light on the adoption of MSPs by intermediaries in their business models to reintermediate themselves because the sole reliance of intermediaries on orthodox business models is pushing them on to the verge of disintermediation.*

Keywords *Distribution channels, Intermediaries, Disintermediation, Travel agency, Multisided platforms (MSPs), Global distribution system (GDSs)*

Paper type *Research paper*

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Introduction

The inevitable developments and advancements in information and communication technologies (ICTs) have changed the world, the economies, the businesses and the routine lives of humans in almost every sphere of life. The travel industry has evidenced these changes and developments both on the supply and demand sides. The evolution of

the internet brought a major shift and change in the travel industry with the launch of direct-booking websites by airlines and hotels, online travel agencies (OTAs), metasearch engines, application programming interface (API) connectivity, new distribution capability (NDC), etc. (Gholami *et al.*, 2017; Loureiro, 2016). Before the advent of the internet (before the 1990s), intermediaries such as aggregators, consolidators, wholesalers and travel agencies (TAs) in the travel sector exploited customers based on the information and knowledge solely accessible by them (Andreassen, 2015). But since the commercialization of internet technologies, the sole control of intermediaries lowered because of easy access to information, enhanced transparency and the evolution of new online channels of distribution in business to business (B2B) and business to customer trading (Buhalis and Law, 2008).

This threatened the role of intermediaries, and the discussions related to their disintermediation became a hot topic in the travel industry and in the academic literature (Abrate *et al.*, 2019; Silvennoinen, 2017; Cheyne *et al.*, 2006). Disintermediation did not mean the end of the story for intermediaries such as wholesalers and travel agents, rather the developments in ICT added a variety of business opportunities and perspectives for them as well if adopted and integrated adequately in their operations, communication, marketing, procurement and supply chain (Stamboulis and Skayannis, 2003; Bigné *et al.*, 2008). Intermediaries require reconfiguration and adoption of up-to-date ICTs to resist disintermediation and to survive competitiveness and dynamism in travel industry because of the increase in demands for customized travel options facilitated by economic and technological developments (Al-Weshah *et al.*, 2013; Lin and Fu, 2012; Dixit *et al.*, 2006).

Increasingly, companies operating in B2B-oriented trade in different markets around the world are focusing on value creation by establishing multisided platforms (MSPs) where suppliers, distributors, partners and customers can interact and contribute (Falk and Riemensperger, 2019). Adoption of MSPs by the intermediaries facilitate them to think out of the box and diversify themselves to avoid their obsolescence. Intermediaries in the travel industry, who are challenged by the threat of disintermediation, have an opportunity to remain competitive by adopting and using MSPs (Silvennoinen, 2017).

This study explores the trend of MSPs for two crucial intermediaries, TAs and global distribution system (GDSs), in the travel industry, by focusing on their adoption of MSPs, which lowers the risk of their disintermediation and contributes to their survival in the long run. The paper is structured as follows: first brief descriptions are provided for TAs, GDSs and MSPs, which are followed by the methodology, discussion and conclusion.

Travel agencies

Travel agencies (TAs), both offline and online, are the intermediaries in the supply chain of travel industry and are central to travel distribution for which they earn commission-based revenues from GDSs and airlines (Cheyne *et al.*, 2006). TAs link thousands of suppliers for various travel offerings to the consumers who are shoppers, selectors and purchasers of these versatile and dynamic packages (Quinby, 2009). They provide advisory and consultancy to potential travelers based on their expertise, acting in the best interest of the consumer. At the same time, they also operate as an indirect representative of the providers, issuing tickets on their behalf, as the providers outsource the sale of their products and services to them (Cheyne *et al.*, 2006).

Traditional TAs have the strengths of face-to-face interaction and a strong customer base which they have established over time (Munikrishnan *et al.*, 2019). TAs with their interpersonal competencies are considered to be helpful, reliable, professional and highly skilled by customers, and customers feel pleasant and delighted during their interaction with TAs (Wu *et al.*, 2018). They also added that TAs with their technical expertise have a higher tendency and efficiency in resolving customers' issues. According to Buhalis (2003),

TAs have the advantage of niche marketers and, thus, possess a market share in niche markets. Preference to TAs is given by customers because they can arrange complex travel packages, offer travel and tours consultancy, handle problems, facilitate in answering queries and maintain a good customer relationship with their clients (Cheyne *et al.*, 2006).

Research and discussion about the trend of ICTs in airline distribution and the threatened role of intermediaries started in the 1990s after the diffusion of the internet in the market (Buhalis, 1998; Lewis and Talalayevsky, 1997). According to some studies, brick-and-mortar TAs around the world are either displaced by diffusion of ICTs (Abrate *et al.*, 2019) or are slowly being replaced by OTAs (Weber, 2013; Olenski, 2015). On the contrary, some studies argue that since 2011, travel agents' use of GDSs such as Amadeus, Galileo, Sabre and Worldspan have increased (DeVoren and McGrann, 2013). With the aforementioned challenges and the changing demands of travelers, the suppliers no more rely solely on the travel agents for the sale and distribution of their products and services, rather make their offerings through a variety of booking channels (Quinby, 2009).

Even though travel agents serve the roles of both intermediary and infomediary, they have evidenced a certain level of disintermediation because of the developments in ICTs (Abrate *et al.*, 2019). In Britain, during the last seven years, a quarter of travel agents went out of business including the giant Thomas Cook with its demise in 2019 (Onita, 2019). In this era of globalization backed by ICTs, TAs are facing the challenges of how to maximize profit margins and lower the costs, in parallel with the competition faced from OTAs and direct offerings on suppliers' websites (Gholami *et al.*,2017). This has complicated the job for travel agents as they have to look for different prices, offers and options on different platforms before finalizing a booking. For example, according to a study by Altexsoft (2019), travel agents access 17 websites on average for their information gathering and the consequent booking. Competitiveness can be achieved by traditional TAs with the adoption and effective use of ICTs in their operations (Cheyne *et al.*, 2006).

Global distribution systems

A GDS collects and consolidates travel content from a variety of suppliers into one system, using which the travel agents can reserve flights, hotels, cars, cruises and railways (Pan, 2016). In this way, the TAs are not bound to contact, collaborate and connect with each travel provider separately. These technological developments and transformations made the travel and tourism industry more competitive within a short span of time (Buhalis, 2016). Over the course of time, different GDSs have originated in the travel industry to facilitate the search and the availability of content with increased frequency, precision and speed (Budiasa *et al.*, 2017). GDSs like Amadeus, Galileo and Sabre are the key flight aggregators since the mid-1990s, serving as the intermediaries between the suppliers of the travel and tourism content and the distributors, sellers or buyers of these travel products (Pan, 2016).

Internet and technological advancements have changed the mechanisms for the distribution of travel content (Wang and Kracht, 2016). During the 1970s, computer reservation systems (CSRs) were used by the vending airlines as a distribution tool which lead to a locked partnership with the travel agents (Schulz, 1997). From the early 1980s, the GDSs entered the market. From the mid-1990s to the early 2000s, distribution was further enhanced with the internet-oriented distribution. From the early 2000s till 2005, the OTAs model was added into the distribution. And since 2005, the meta-searches have become part of the distribution channels (Cheng *et al.*, 2012). GDSs are still the lead suppliers for travel-oriented products with a big pie in the market because of their vastness in offerings, transaction management, scope and relationship with suppliers such as airlines, hotels, rails, car rentals, etc. (Altexsoft, 2019).

For almost 40 years, the GDSs provided "booking, pricing, amending itineraries, billing and invoicing" functionalities to the travel agents (Loureiro, 2016). GDSs accomplished it by

improving their mid-end and back-end operations and activities, focusing on quality mechanisms, customer relationship management, marketing tools, technologically advanced booking engines, etc. (Quinby, 2009). Although many OTAs depend on GDSs for shopping, booking and comparing different products such as flights, hotels and transfers, GDSs have launched their own OTAs as well such as Opodo (owned by Amadeus), Travelocity and GetThere (owned by SABRE) and Orbitz and Traversa (owned by Travelport) (Quinby, 2009).

Today, the marketplace of the travel industry is information-oriented, which requires the distribution and availability of information in an adequate, timely, convenient and cost-effective manner for the players involved in the value chain from the supplier to the end-consumer (Özturan *et al.*, 2019; Kutlu and Özturan, 2001). The entry of low-cost carriers (LCCs), NDC program by IATA and airlines direct-connect business model has challenged the prevailing GDS models because of their unbundled offerings of ancillary services presented separately to the travel agents, corporates and passengers (Altexsoft, 2019).

Even though the proliferation of ICTs lowered the reliance on GDSs, the majority of TAs around the world still use GDSs as their primary travel content providers to access comprehensive and trustworthy information for bookings and reservations from a variety of suppliers (Gholami *et al.*, 2017). The overall rapid, complex and interlinked changes in the travel industry have led the GDSs to re-configure their business models by developing API or Web services which can be integrated into online portals and platforms. GDSs have achieved this by the development of tools and technologies that includes the introduction of new functionalities such as making point-of-sale technologies more effective, launching graphical user interface (GUI) and integration of XML/API technologies (Loureiro, 2016).

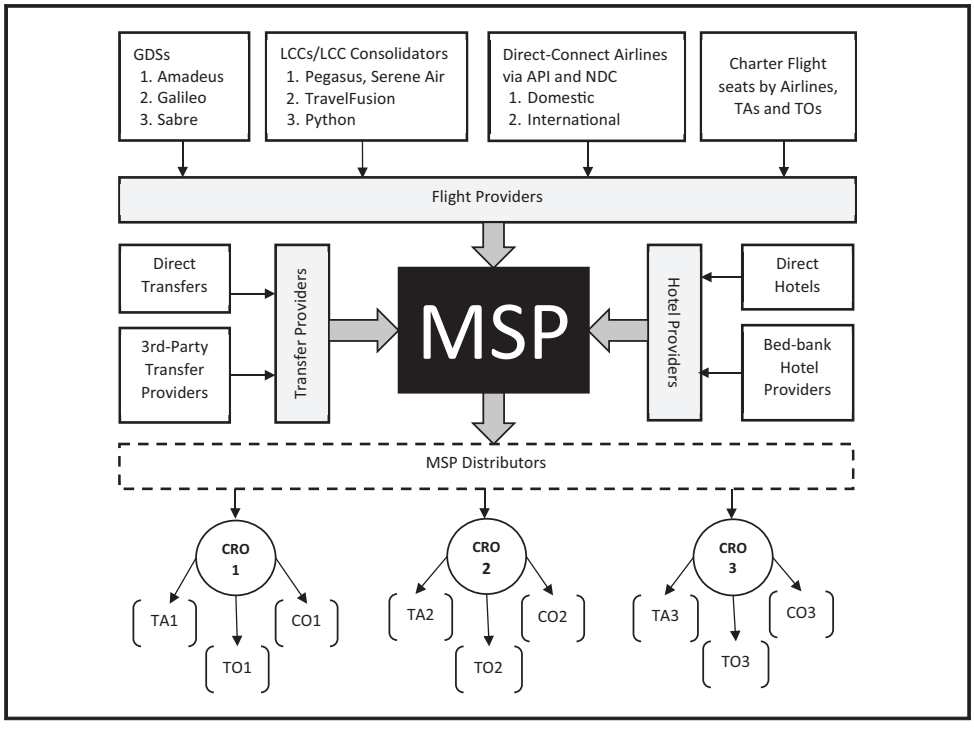
Multisided platforms

Platforms are the means of communication among individual or group users to interact, communicate and transact with each other. From a general perspective, platforms are technologies used in a variety of industries (Evans *et al.*, 2006), which offers cost-saving (minimizing transaction cost) and value-creation (enhancing transaction value). The definition of the platform given by Rochet and Tirole (2003, p. 1017) is: "A market with network externalities is a two-sided market if platforms can effectively cross-subsidize between different categories of end-users that are parties to a transaction." They are business models that create values by facilitating exchanges among different groups of users such as producers and consumers (Citron, 2013).

MSPs in the travel industry were initiated to offer a comprehensive ICT-based travel booking platform for B2B suppliers, distributors and sellers. The main focus under consideration was to ease and simplify the workflow and operations of travel intermediaries around the world (Silvennoinen, 2017). The success of MSPs lies in the versatility of Web services integrations it can operationalize, for instance, the integration of GDSs, consolidators, direct-connect airlines, NDCs, virtual point-of-sales, etc. MSPs have equipped intermediaries with tools, technologies and solutions needed for supplying, distributing and selling the travel content on one platform, with access to information, prices and packages which ease comparison, monitoring and control (Silvennoinen, 2017).

The MSP examined in this study uses a centralized model of consolidation and distribution (Figure 1). Under this model, a variety of suppliers such as flights, hotels and transfers offer their content to the MSP; MSP consolidates the content into its platform; and finally, the MSP offers the content to its distributing partners, known as country representative offices (CROs). CROs distribute the MSP to TAs, tour operators (TOs) and corporates (COs) to make bookings, reservations and transactions on the MSP in an easy and simple way. The MSP provides monitoring and control tools, along with other strong back-end solutions for financing, reporting, users' management and providers management. Each TA has a

Figure 1 Centralized consolidation and distribution model of the case study MSP



separate agent id, account and agency balance on the MSP. For bookings and reservations, TA transfer funds to the CRO and then the CRO transfer funds to the MSP's headquarter in Turkey which reflects this balance in their CRO account. It is the MSP that makes the payments to its different suppliers, for instance, payment for GDS-accessed airlines is made via Billing and Settlement Plan of the International Air Transport Association (IATA).

The centralized model of consolidation and distribution used by the case-study MSP is presented in Figure 1. The rectangular boxes represent the providers such as flights, hotels and transfers. Flight providers aggregate content from GDSs (Amadeus, Galileo and Sabre), LCCs (Pegasus, flydubai, Air Arabia, SereneAir, etc.) or LCC consolidators (Travel Fusion and Python), direct-connect airlines via API (Onur Air, Sun Express, etc.) and NDC (Lufthansa, Saudi Arabian Airlines, Oman Air, etc.) and charter flight seats by airlines (Corendon), TAs (Konyaaltı Travels) or TOs (TUI). Hotel providers have content from bed-banks (Hotelbeds, GTA, DOTW, etc.) and direct hotels (Rixos, Delphin, etc.). Similarly, content transfer both from the direct-provider and from the third-party transfer providers are available on the MSP. The content from a variety of providers is consolidated by the MSP in a centralized way on its cloud servers located in Istanbul and Frankfurt.

The distribution of the MSP and the travel content is handled by the CROs in different countries of the world. CROs are represented by circles in the figure. These CROs are authorized for the distribution of the MSP, either exclusively or non-exclusively, based on their performances in terms of their local investments, sales and market share in respective regions. As shown, CROs distribute the MSP to TAs, TOs and COs in their countries which are called sub-agents (SAs) by the MSP and the CROs. SAs, which are represented by parenthesis in the figure below the CROs, can make bookings and reservations directly on the MSP if they have sufficient balance or credit limit for the bookings. SAs for all their

queries and problems contact the CROs, who are in regular contact with the MSP. MSP gives adequate consideration to the opinions, feedback, requests and queries received from the CROs, based on which further developments and customizations are made to the platform.

Methodology

The study was conducted on a software solution company based in Antalya, Turkey, which has developed a MSP for the travel industry. Semi-structured interviews were conducted with the owners and/or top management of the CROs to explore the importance of MSPs for intermediaries such as TAs and GDSs. The chosen CROs have been using the MSP for more than six months and possess deep knowledge of distributing the platform to B2B enterprises in their local countries. The interviews were conducted either online on the Zoom application or in-person from January to October 2019. In total, 15 interviews were conducted from the CROs of Azerbaijan, Canada, China, Egypt, Georgia Jordan, Kosovo, Libya, Malaysia, Nepal, Pakistan, Palestine, Philippines, Qatar and Yemen. The interviews lasted for 1 h on average. All the interviews were tape-recorded which were later transcribed for discussion and analysis.

Discussion

According to the interviews, MSPs serve to be one of the channels used by TAs for searching and booking travel content online. TAs use MSPs either as the main booking platform or as a secondary support platform besides their other main booking systems. Small- and medium-sized TAs with limited resources preferred MSP as their main booking platform because the criteria to have access to a dedicated GDS are tough. It is not easy for TAs to get their dedicated ticketing authority, licensing and accreditation from suppliers and regulatory authorities such as the IATA. Thus, for the non-IATA TAs, MSP offered a reintermediation opportunity, by the adoption of which they can either lower or eliminate the risks of disintermediation. IATA-accredited TAs used MSP as a secondary support platform to search, reserve and book content which was not accessible to them via their main booking systems such as GDSs or to access the content which was not available for sale in their geographic location.

The MSP offers simple and easy to use front-end with strong back-end support tools for administration, finance, reports, call-center and provider management. TAs easily manage and control their bookings, commission earnings, refunds and reports from the MSP. This saves time and cost for the TAs as they do not require to switch to any other system or platform for back-end operations. According to the CROs, the distribution of MSP facilitates them and their TAs in lowering their costs, increasing their effectiveness and generating additional revenues. All the CROs considered the MSP to be a breakthrough technology with the help of which TAs can easily reconfigure themselves in the industry and have a prospective future. TAs in countries like Libya, Palestine and Yemen regard the MSPs as a blessing because it has been through MSPs that they can book travel services for their travelers. All the CROs had consensus on the point that MSPs facilitated TAs in their reintermediation process. Moreover, the industry evidenced the entry of new TAs because of the ease of registering and the simplicity in conducting travel booking operations on MSP.

According to the data collected from the interviews, the MSP facilitated its CROs in different countries to integrate their respective GDSs such as Amadeus, Galileo and Sabre into the MSP. Local GDSs in countries like Azerbaijan, Kenya, Nepal, Pakistan, Philippines and Qatar fully supported the integration of their system into MSP because it will increase their market share and multiply their sales in manifolds because of its accessibility to the TAs on the MSP. GDSs developed Web services that can be smoothly integrated into any kind of platform which supports XML/API integrations. Swift integration of these GDSs in MSPs is a

powerful way in which they can reintermediate themselves in the supply chain because of the intensive and extensive reach of MSPs around the world.

The GDSs are in a coopetition relationship with the MSPs, which means that they collaborate with the MSPs but at the same time regard them as their competitors. This is because MSPs have multiple GDSs integrated into their platforms, and MSPs serve to be "aggregator of the aggregators" as mentioned by one of the interviewees. GDSs need to make sure that they are in a collaborative and strengthened relationship with MSPs because at times an MSP might have multiple GDSs integrated into the system. Using advanced technological support, good segment rates, appealing advance payments, lenient look-to-book ratios and other incentives offered by the GDSs can be attractive for the MSPs through which they can grab long-term deals.

Conclusion

This paper aimed to identify and present the trends of MSPs in the travel industry. MSPs are the new intermediaries in the supply chain of travel services, developed to facilitate intermediaries in having access to global travel content, increase sales and evade the threats of disintermediation. The enhanced tools and technologies of MSPs with their GUIs facilitate TAs and GDSs with easy connectivity and integrations. TAs, most of which were on the verge of disintermediation because of their offline and orthodox business models, revived themselves with the adoption of MSPs. TAs using MSPs easily got online with access to a wide range of global travel services in one single platform. The adoption rate of MSPs among TAs has been quite promising because of the simplicity and ease of use offered by MSPs. Similarly, GDSs using their APIs/Web services can be easily integrated and merge their systems into MSPs. The integration of GDSs into the MSPs has allowed them to reacquire their deteriorating market shares around the world and increase their sales in manifolds.

Based on the results of this study, we suggest the following futuristic approaches for MSPs, TAs and GDSs. The MSPs should consider switching from a centralized model into a decentralized hybrid model, in which bookings, reservations and transactions would not be handled by the MSPs in a centralized way. This transition of the MSPs from a centralized framework to a decentralized one would attract more suppliers and sellers to pour in and show their interest in the platform. In this way, the network effect for the MSPs would increase in manifolds, and obtaining critical mass for the MSPs would be quicker and easier. Switching to the decentralized hybrid model would allow the MSPs to solely focus on the tools and technologies they offer on their platform, rather than focus their resources on getting the best and competitive deals from the suppliers.

Implementation of a decentralized model would transform the MSPs into marketspaces where multiple suppliers can offer content with a variety of options and prices to the sellers, and the sellers can transact directly with these suppliers for the content they want to book or reserve. Under the decentralized model, the network effects of MSPs would be high, and thus, we suggest that the GDSs should develop a relationship of trust with the MSPs rather than consider them as their competitors. In this way, the GDSs can reap maximum benefits from the MSPs in the future by both increasing their sales and market shares in different countries.

The future for both IATA and non-IATA TAs seems promising with their access to MSPs which would lower their cost of doing business and maximize their earnings. IATA-accredited TAs can integrate their GDSs into MSPs via Web services which can be accessed by other TAs registered on the MSPs in a controlled and monitored way. Whereas, TAs which are small in size and scope and do not have adequate financial resources to acquire their own IATA certification can access the travel content from variety of providers using MSPs.

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