NDC:
Travel Agencies' Enabler to Success

Insights into how travel agents see NDC impacting their business

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IATA WTAAA
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EXECUTIVE SUMMARY

The way the world searches, plans, and buys air travel is continuously changing as digital technologies and a changing airline commercial environment spur product innovation. A key part of this is the New Distribution Capability (NDC) that IATA, the trade association representing the world's airlines, is spearheading. NDC consists of a series of XML-based schemas that will enable participating airlines to improve how third parties, including GDSs and travel agencies, search for and book flights.

Because travel agents are the prime target audience for NDC, the World Travel Agents Association Alliance (WTAAA) approached IATA to request that IATA research travel agencies' knowledge of NDC, including their awareness, expectations, and concerns. The research included telephone interviews with 22 travel agency executives in six countries and an online study of 1,034 travel agents in seven countries. Key findings from the research included:

- **Travel agencies use a diverse mix of channels to book clients' flights.** As airlines have evolved what they sell, and how they sell it, agents have adjusted. Although GDSs remain the predominant channel agencies in our study use to book airline reservations, on average, a travel agency in our survey books 26% of its air reservations outside the GDS.

- **Airline product complexity influences agency booking behaviour.** Agents have had to respond to airlines' evolving product strategies. To be competitive and serve a diverse mix of travellers, airlines have introduced a variety of products to the marketplace. Two categories, "Branded Fares" and airline ancillary products, have influenced airline distribution strategies – for example, airlines may offer all of their optional ancillary products through their websites, but the GDSs may carry only a portion of these. To serve their clients, travel agencies use airline websites and other channels to book these products. A majority of agents in our study feel that airline websites have an advantage over GDSs in terms of content, and view the booking channel fragmentation as counterproductive.

- **NDC-enabled processes must be usable in multiple GDS environments.** Agencies are more likely to use the GDS native display, also known as "green screen", to book airline ancillary products than other channels. Fifty-four percent of the travel agencies in our study use the native display to book ancillaries, ahead of agency desktop solutions (44%) and proprietary agency solutions. As NDC-enabled processes are brought to market, NDC providers, which include airlines, GDSs, mid- and back-office software firms, and other travel technology firms, must create ways to present airline products and enable booking via both GDS native displays and through agency desktop applications, which use graphically rich user interfaces.

- **Travel agents express limited awareness of NDC.** Although NDC has been discussed extensively in travel trade press and elsewhere, more than half (53%) of the agencies in our

survey said they hadn't heard of NDC before they took our study. The takeaway here? It will be very important for each NDC provider to deliver a singular view of what NDC is, what it means, and what its value is to each of the respective stakeholder communities.

- **Agencies are optimistic about NDC.** In spite of agencies' limited awareness of NDC, they show considerable interest in the program. Why? Agencies want better access to airlines' complete catalog of fares, products and offers – and they believe NDC-enabled processes will help them achieve that. Agencies believe NDC-enabled processes will help provide easier access to all relevant airline fares and products, allow them to search for and book the content through a single GDS screen, and lead to faster transaction times.

- **Agencies want to be positioned for success using NDC.** As a new and somewhat unknown series of processes and solutions, agencies want to be sure that NDC providers will create effective "onboarding" programs as they begin to use NDC-enabled solutions. In our survey, agencies' primary concerns about NDC are the costs to support NDC implementation, employee training to use NDC-enabled processes, possible added booking complexity associated with using NDC-enabled processes to search for and book flights, and ongoing product and technology support. Even though much of NDC will operate on the back-end, invisible to agencies or their clients, agencies deserve the support of the NDC provider community to ensure they are equipped with the tools and training needed to use NDC effectively and fully.

INTRODUCTION

INTRODUCTION FROM WTAAA

A coalition of members of the WTAAA have participated in the development of the survey used in this report and in the development of this report, and we welcome the content of this report to the travel industry discussion about IATA's new NDC standard. It is important to note that the involvement of the various travel agency associations is by no means an endorsement of NDC. Each individual travel agent across the globe who elects to sell airline products in the future will need to form their own views on NDC, should the market choose to adopt it.

The report was funded by IATA and we thank IATA for this investment.

INTRODUCTION FROM ATMOSPHERE AND T2IMPACT

Atmosphere Research Group and T2Impact are honoured to have participated in this project. The diverse nature of the world's travel agency community makes it is vitally important for NDC providers to have an objective, accurate, and viable perspective of how agencies view NDC. It is very clear that, in spite of travel agencies' concerns, a significant number believe NDC may be able to provide a meaningful path for them to become more competitive selling air and be in a position to improve their efficiency as they serve and support their clients. We hope this report will provide helpful insights to NDC providers, including airlines, Global Distribution Systems (GDSs), mid- and back-office software firms, and other travel technology firms working to develop and implement NDC, so that this report can function as a relevant, pragmatic, and useful resource.

INTRODUCTION FROM IATA

Aviation is a team effort. Every flight that takes off is the result of the planning and hard work of numerous individuals and organizations across the aviation value chain. Travel agents are important partners in the business of delivering connectivity. The 79,000 IATA accredited travel agents around the globe are the link between airlines and many of their customers. Understanding our respective challenges is important and contributes to a stronger relationship.

For more than three years now, IATA and our partners in the travel value chain have been working on the New Distribution Capability (NDC), an XML-based data transmission standard that will enhance the capability of communications between airlines and travel agents.

To help us better understand the benefits and implications of NDC from the perspective of travel agents, IATA joined with the leading travel agency associations in some of the key air markets around the globe to develop this survey. As we share the findings across the industry over the next few months it is our hope that they will provide helpful perspectives and guidance in supporting the deployment of NDC.

Disclaimer

IATA funded this report and provided administrative and editorial feedback and support during its development. However, the views and opinions expressed are those of its authors based on survey responses, and do not necessarily reflect those of IATA or its member airlines.

The coalition of agency associations which have participated in the process that led to this report represent a broad range of travel agent business models and come from many countries. The collective contents of this report do not reflect the collective views of all of the associations involved or their member's views whatsoever.

RESEARCH METHODOLOGY
(Including goals and objectives of study)

IATA's New Distribution Capability (NDC) is a bold, broad-based initiative which is intended to modernize the way airline products are distributed through third-party channels, including travel agencies. Another objective for NDC is to help the world's travel agency community improve their productivity in selling airline services.

Recognizing a need for NDC providers to more thoroughly understand how the world's travel agencies view NDC, the World Travel Agents Associations Alliance (WTAAA) approached IATA about collaborating on objective, independent research to develop clear, comprehensive, and definitive insights into agencies' awareness, expectations, and concerns. IATA, recognizing that NDC will succeed only if NDC providers also share that same degree of understanding, agreed to participate – and also agreed to underwrite the project's costs.

WTAAA recruited the support of seven travel agency associations and councils from around the world. The Brazilian Travel Agencies Association (ABAV), The Association of Canadian Travel Agencies, (ACTA), The Australian Federation of Travel Agents (AFTA), The Association of South African Travel Agents (ASATA), The American Society of Travel Agencies (ASTA), The Travel Agents Association of New Zealand (TAANZ), and the Travel Agents Federation of India (TAFI) all agreed to participate in the effort, contributing to the development of the research study and reaching out to their members to invite them to participate in the research. In addition, the WTAAA, the seven participating travel agency groups, and IATA all contributed their insights into the development of

this report.

IATA hired Atmosphere Research Group, an independent travel industry research firm, and T2Impact, a travel industry consultancy, to conduct the research and write this report. Atmosphere and T2Impact conducted both qualitative and quantitative research for this study, whose details are discussed below. The WTAAA and the seven participating travel agency associations, along with IATA, reviewed and provided input on the various drafts of this report prior to publication.

This study was conducted against the background of several factors. To start, there is the need to understand the complexity of today's airline product, and how it has fundamentally changed, that is the core driver for new distribution capabilities. Product choice and personalization are new to all parts of the airline distribution channel. Airlines' differentiated product needs have changed from the pure fare-related products of old. Airlines are also using new tools and working in new ways to deliver their products. Airlines' "Branded Fares" and their ancillary products and services are sold by carriers' websites, but not always in the traditional channels travel agencies use.

SURVEY METHODOLOGY DETAILS

The qualitative research consisted of a series of telephone interviews with 22 travel agency executives in six countries. Each interview lasted between 45 minutes and one hour. In keeping with research best practices, the executives who participated were promised confidentiality for their participation, and were promised that details about their names and company affiliations would remain anonymous.

The quantitative research consisted of an online

global study of 1,034 travel agency executives, primarily in Australia, Brazil, Canada, India, New Zealand, South Africa, and the USA. In Brazil, participants had the option to take the survey in Portuguese or English; in all other countries, the survey was offered only in English. To preserve the confidentiality and integrity of their membership lists, each participating travel agency association emailed an invitation to its members to take the survey (the email included a link to the survey). The survey was designed to take no more than 12 minutes to complete. All responses were anonymous, no personal or other information about participants was stored or collected, and no financial or other incentives were offered to encourage agent participation. Only responses from fully completed surveys are included in the data used for this report.

The online study reflects travel agencies' complexity and diversity. A total of two-thirds of the agency respondents in the online study were from the US and Brazil, 15% were from Australia, nearly six percent from Canada and four percent each from New Zealand and South Africa *(see Figure 1)*. Participants were asked to choose the agency segment that best matched their business; response options included travel management companies (TMCs), online travel agencies (OTAs), Consolidators, Wholesalers/Tour Operators, offline, retail/high-street leisure-focused agencies (which we refer to as retail agencies within this report), and an "other" category. Fifty-nine percent of the agencies participating in the study described themselves as retail leisure-focused travel agencies *(see Figure 2)*. We draw the reader's attention to the glossary of terms at the end of this report to assist in comprehension. Different terms are used in different parts of the world.

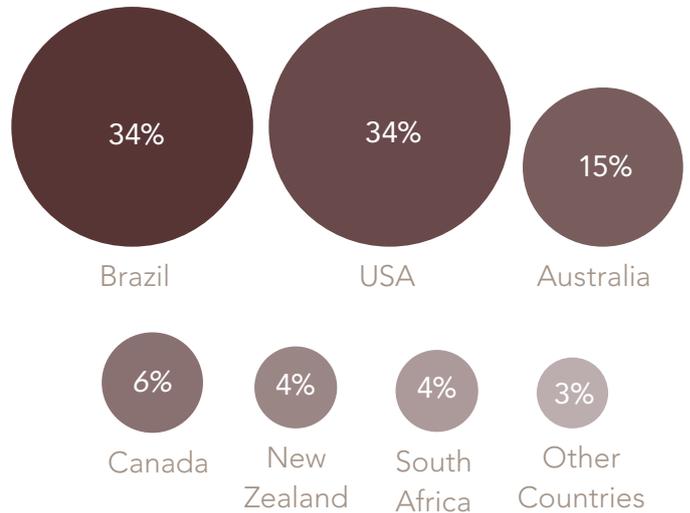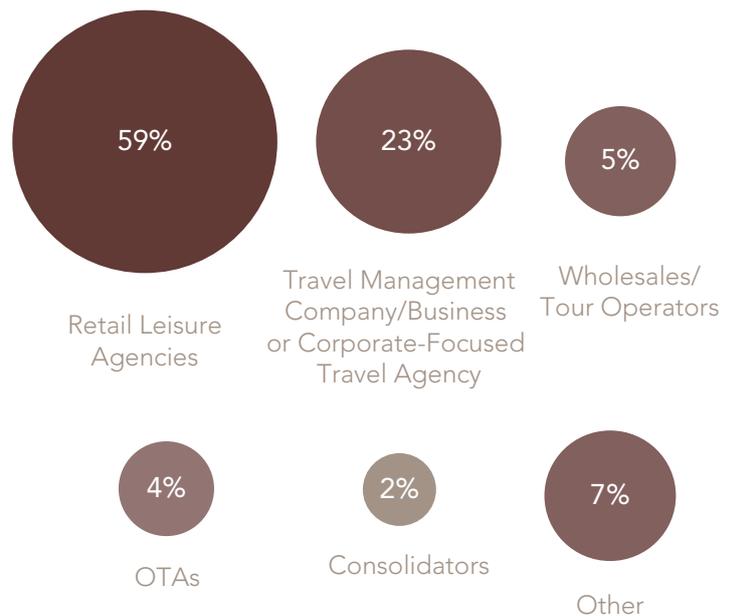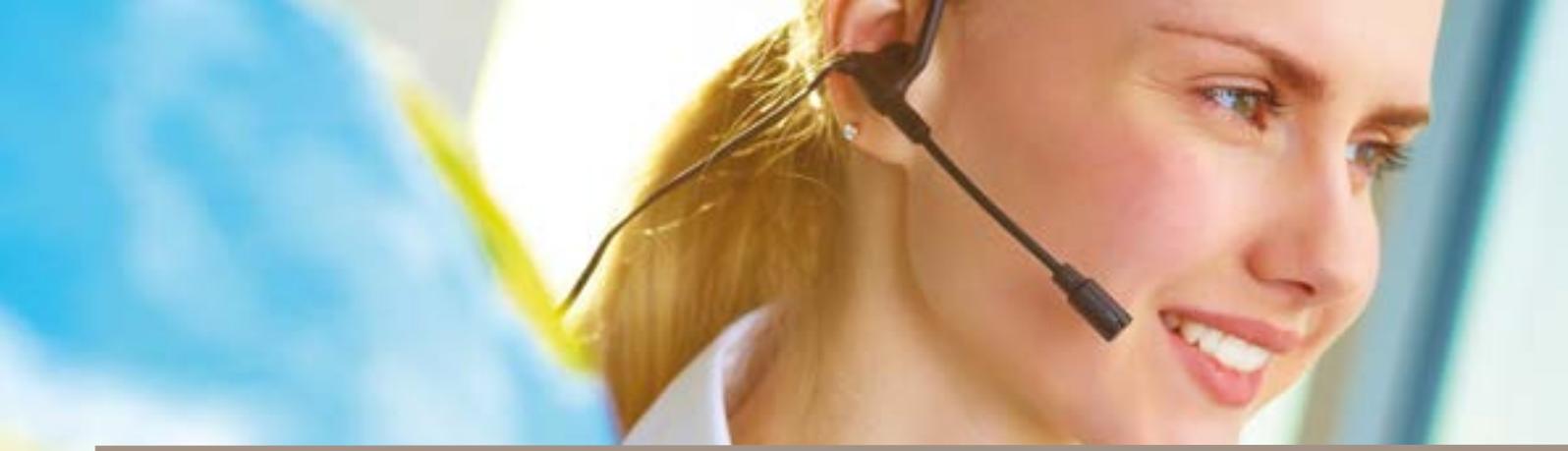Figure 1:   A Global Group Of Travel Agencies Participated In This Study

Figure 2:   Of The 1,034 Participating Travel Agencies, Most Were Offline, Leisure-Focused Businesses

NDC: A CRITICAL COMPONENT TO RESTORING TRAVEL AGENCIES' COMPETITIVENESS

The past 20 years have not been the kindest to the global travel agency community. Changes in airline distribution strategies and airlines' abilities to use digital channels to sell directly to consumers have all contributed to a decline in the share of airline reservations processed by the world's travel agencies.

According to T2Impact, the most recent full-year data (2014) indicates that agencies account for just 30% of the airline tickets issued worldwide — although IATA, in its 2015 annual report, suggests these tickets represent 60% of the total value of airline reservations made. This reflects the emergence of new airline business models, changes in how airlines choose to bring various products to market, and, as a result of airlines growing their direct share of bookings via online digital channels, and fewer retail agencies (which have also faced stiff competition from online travel companies).

The way the world searches, plans, and buys air travel is continuously changing. The airline prod-

uct set and its purchase mechanisms have radically been altered. As with seemingly every other consumer category, digital technology has permanently altered airline distribution.

Gone forever, on most airlines, is the time when a traveller or travel manager need focus only on routes, schedules, and airfare to determine the "best" flight for a journey. Many airlines now offer "Fare Families" or "Branded Fares" to distinguish their fare products from one another, and from those of their competitors, and to help travellers find the value they seek. Airlines' ancillary product-focused business models extend choice and control to the traveler by letting them select, or decline, various airlines features and amenities. The result is a planning and booking process that has become far more complex for both travel agent and travellers. Ancillary products have also allowed airlines to generate higher revenues and profits.

To help airlines, travellers, and the world's travel agency community improve the process of searching, booking, and extracting value from scheduled airline flights, IATA, the trade association that

represents the world's airlines, has been spearheading the development of the New Distribution Capability (NDC). NDC is a series of XML-based schemas that airlines can use to improve flight search, booking, and transaction processes via third-party channels, including GDSs and travel agencies.

As it is implemented, the intent is for NDC to help airlines and agencies shift travellers' flight purchase decision-making from commodity-like comparisons of schedule and price to a more robust, experience- and value-focused process. How? NDC's schemas will allow the airlines that opt to use it create personalized, relevant offers to travel agencies and their clients via the distribution channels agencies use, such as GDSs. The objective of NDC is to help travel agencies across all segments – including retail leisure agencies, TMCs, OTAs, and others – become more competitive with airline direct channels.

NDC should enable agencies and their travelers to search and book flights based on what the traveller wants, from a fare that offers just a "seat and seatbelt" to a more comprehensive experience that includes multiple amenities and services. Business travellers using a TMC should see their negotiated fares and any benefits negotiated between their employers and their preferred carriers. Elite-tier airline loyalty members should see the perks provided as a result of their loyalty status. NDC should enable more appropriate offers to be made to a traveller, yet will deliver the capability into the market of solutions that are both direct and indirect via agents.

There are many intertwined components and relationships in bringing NDC to market. To say otherwise, or to ignore them, would be wrong.

Ultimately, NDC's promise will only be fulfilled if all members of the NDC provider community commit themselves to understanding, supporting, and fulfilling agencies' unique and specific needs to successfully and efficiently serve their clients once NDC is brought to market.

It's important to acknowledge a few points. To start, NDC remains in its early stages of development; full deployment of all NDC capabilities may take several years to complete.

Next, based on factors such as business strategies, business models, and technology, financial, and staff resources, some carriers may decide to deploy a subset of NDC standards – or not deploy NDC at all. As useful as NDC may be, it is not mandatory for airlines, or any other party to adopt it.

Finally, as comprehensive as this report is, and as based in data as it is, inevitably industry, technology, or market conditions will evolve in ways that will create the need for more, and different, solutions than are outlined here.

TRAVEL AGENCIES HAVE DIVERSE RELIANCE ON AIRLINE SALES

Even though the agency channel accounts for fewer airline ticket sales compared to years past, airlines remain an important product category for travel agencies. Data show that TMCs and brick-and-mortar agencies produce above-average yields for airlines[1].

The TMCs, Consolidators, and OTAs in our survey generate the highest proportion of their sales or turnover from air *(see Figure 3)*.

A wide variance exists in the gross sales of airline tickets among the agencies in our survey, reflecting factors such as agencies' different segments, customer mix, and more. Across the board, on average, an agency in our study sold US$30.8 million in airline tickets in the 12 months preceding
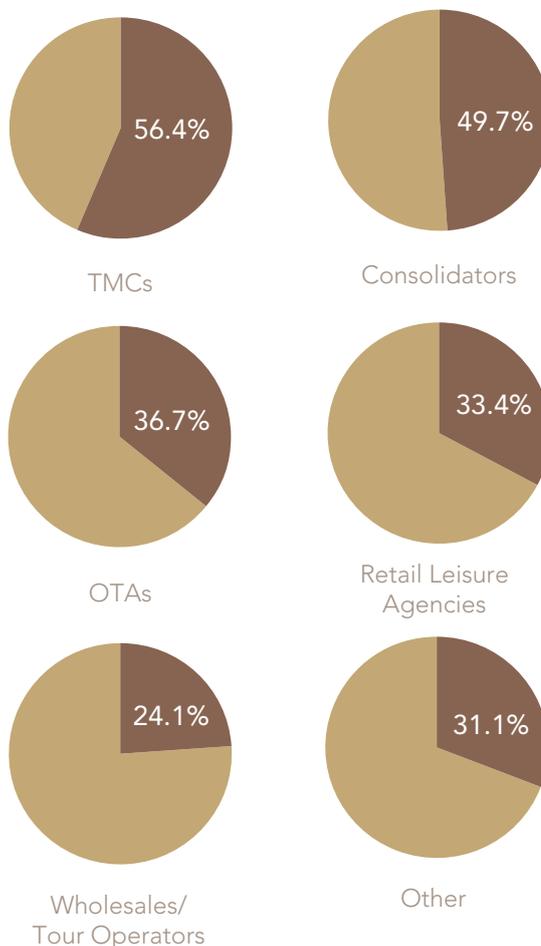
Figure 3:   Airline Tickets Represent Highest Proportion Of Product Sales To TMCs, Consolidators, and OTAs

● Percent of annual agency sale/turnover generated from airline sales

56.4%
TMCs

49.7%
Consolidators

36.7%
OTAs

33.4%
Retail Leisure Agencies

24.1%
Wholesales/ Tour Operators

31.1%
Other

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group

the survey *(see Figure 4)*, While retail outlets in our study averaged $11.8 million in annual gross air sales, 70% of the retail agencies in our study sold less than $3 million a year in air. As NDC providers develop their NDC-enabled processes, they should keep this audience in mind, since we will later present in this report how their needs may differ from other agency segments.

Figure 4: The Average Agency Sold $30.8 Million In Air Tickets In the 12 months Preceding The Survey

Annual air sales, US$ millions

$207.2

Consolidators

$60.7

TMCs

$60.3

OTAs

$11.8

Retail Leisure Agencies

$10.7

Wholesales/ Tour Operators

$39.2

Other

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group
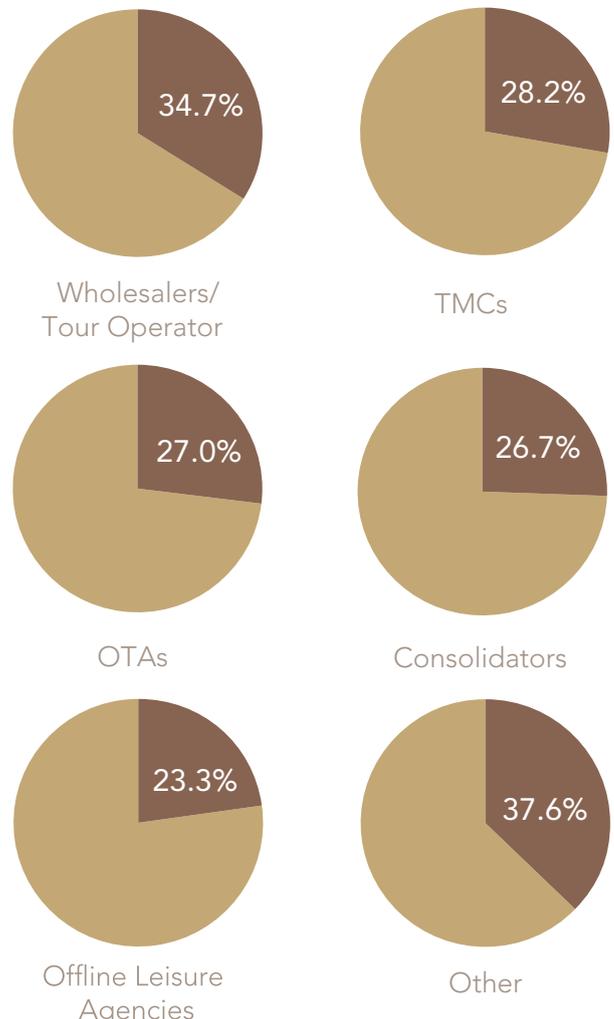
AGENCIES DON'T USE GDSs AS THEIR SOLE SOURCE OF AIRLINE INVENTORY

Airline's changes to their business models have affected their distribution strategies, primarily through GDSs. Some airlines, particularly "Ultra Low Cost Carriers" (ULCCs) avoid GDSs altogether. Others may distribute in only some of the countries where a GDS operates. Some carriers may offer only a portion of their content in a GDS. The result: GDSs are no longer the comprehensive "department stores" housing all airline content.

Travel agencies are resourceful. They adjust to serve their clients and ensure their own success. Agencies have adapted to the changing airline distribution landscape by booking a significant volume – on average, 26% – of their air outside GDSs (see Figure 5). Among the reasons for this may be agencies that operate in markets dominated by ULCCs or LCCs that don't sell in the GDSs, an airline not providing all of its content in the GDSs, or an agency that uses a non-GDS channel to find a lower fare for a traveler.

Figure 5:   On Average, Agencies Book 26% Of Their Air Reservations Outside The GDS Channel

● Percent of agencies' air reservations booked outside GDS

34.7%
Wholesalers/ Tour Operator

28.2%
TMCs

27.0%
OTAs

26.7%
Consolidators

23.3%
Offline Leisure Agencies

37.6%
Other

TWO TYPES OF AIRLINE PRODUCTS DRIVE AGENCY BOOKING CHANNEL FRAGMENTATION

Many factors, including market presence, cost, and the competitive landscape, influence airlines' distribution strategies. We believe "Branded Fares" and airline ancillary products have significantly influenced airline distribution efforts – which, in turn, has impacted travel agency behavior.
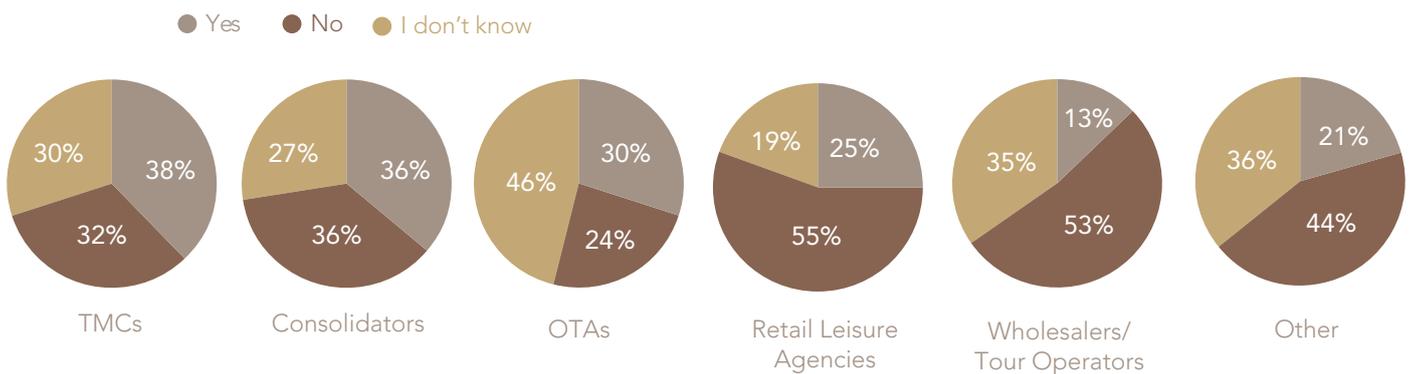
"BRANDED FARES" HELP DECOMMODITIZE AIRLINES

An airline "Branded Fare" (sometimes also referred to as "Fare Families") generally combines products elements, such as seat selection, meals and checked baggage, with functional elements,

such as advance purchase requirements and fare flexibility, in a bundled price. Airlines developed "Branded Fares" to help shift consumers' purchase focus from price alone to a broader set of factors, to help reduce consumers' perceptions of airlines as commodities.

As airlines have worked to reduce commoditization through "Fare Families" and "Branded Fares," travel agents have faced increased complexity to search and book flights. The result is some confusion in the travel agency community. Our study shows that, on average, about one in four travel agencies are uncertain whether they book "Fare Families" or "Branded Fares" *(see Figure 6-1)*. We believe these responses reflect, to some extent, agents' uncertainty about the product definition and the naming convention of airline bundled fares built around a product grouping.

Figure 6-1:   Agencies Uncertain Whether They Sell Airline "Branded Fares"
Agencies' awareness of whether they sell "branded fares"

● Yes   ● No   ● I don't know

| TMCs | Consolidators | OTAs | Retail Leisure Agencies | Wholesalers/ Tour Operators | Other |

TMCs: 38% Yes, 32% No, 30% I don't know
Consolidators: 36% Yes, 36% No, 27% I don't know
OTAs: 30% Yes, 24% No, 46% I don't know
Retail Leisure Agencies: 25% Yes, 55% No, 19% I don't know
Wholesalers/Tour Operators: 13% Yes, 53% No, 35% I don't know
Other: 21% Yes, 44% No, 36% I don't know

Even though GDSs are agencies' most-used channel to book "Fare Families" or "Branded Fares," one-third of travel agencies use airline websites to book these, one in five uses some type of "direct connect" link, and one in ten calls an airline *(see* *Figure 6-2)*. Why? Not necessarily because agencies want to. Instead, these other channels may be the only channels where agencies can find all the airline content presented in ways the agents need to serve their clients.

Figure 6-2: Agencies That Sell "Branded Fares" Use Multiple Channels To Do So
Channels agencies use to sell "branded fares" (multiple responses accepted)

- ● GDS
- ● Airline websites
- ● "Direct connection" to airline system
- ● Calling airlines directly
- ● Other distribution channel

Consolidators
- GDS: 75%
- Airline websites: 25%
- Direct connection: 50%
- Calling airlines directly: 13%
- Other distribution channel: 13%

Retail Leisure Agencies
- GDS: 67%
- Airline websites: 32%
- Direct connection: 12%
- Calling airlines directly: 10%
- Other distribution channel: 11%

TMCs
- GDS: 66%
- Airline websites: 40%
- Direct connection: 30%
- Calling airlines directly: 12%
- Other distribution channel: 9%

OTAs
- GDS: 56%
- Airline websites: 22%
- Direct connection: 11%
- Calling airlines directly: 11%
- Other distribution channel: 33%

Wholesaler/Tour Operator
- GDS: 43%
- Airline websites: 43%
- Direct connection: 42%
- Calling airlines directly: 14%
- Other distribution channel: 14%

Other
- GDS: 81%
- Airline websites: 19%
- Direct connection: 10%
- Calling airlines directly: 5%
- Other distribution channel: 10%

AIRLINE ANCILLARY SALES ARE A KEY FOCUS FOR NDC

Examine any airline financial report over the past few years, and you'll likely see a close correlation between the airline's ancillary revenues and its operating and net profits. For many airlines, ticket sales today are, at best, a breakeven proposition — the profits come from their ancillary product sales. While born in the LCC and ULCC segments, the ancillary model has become an accepted product strategy and business philosophy at network carriers, particularly in the Americas and in Europe. Ancillary products are also, of course, a partial catalyst for the development of NDC.
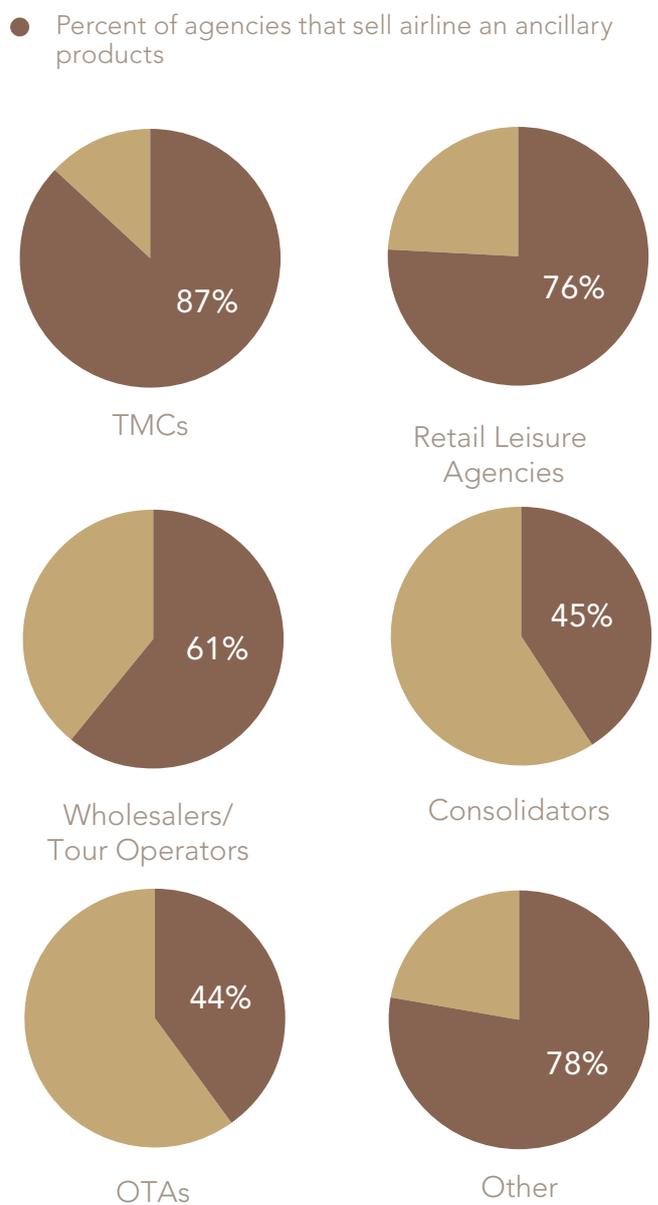
On average, 76% of the travel agencies in our survey book airline ancillary products *(see Figure 7)*. TMCs are the most likely to book airline ancillaries for their travellers, with nearly nine in ten doing so. TMCs' primary audience, corporate travellers, may have travel policies that allow them to buy these products. Three in four retail agencies also sell ancillaries, once again illustrating this segment's adaptability to their commercial environment. OTAs, at 44%, are the least likely to offer these, although announcements indicate progress is being made.[2]

Airlines' websites offer the most complete selection of ancillary products – no doubt the reason why agencies use them most to book ancillaries *(see Figure 8)*. Retail agencies are most likely to use carrier websites to book airline ancillaries. To do this, though, may require an agent to toggle between a GDS, where the agent books the flight, and an airline website, to book the ancillaries. The process is inefficient, reducing agent productivity, driving up agency costs, and frustrating travel agency executives – and, by extension, the travellers the agency serves.

While there may appear to be an inconsistency between Figure 6-2 and Figure 7, this is indeed

a clear example about the difficulty the agency community has regarding the concept of fare bundles (such as "Branded Fares"). However, they are very clear when it comes to the issues around airline ancillary products.
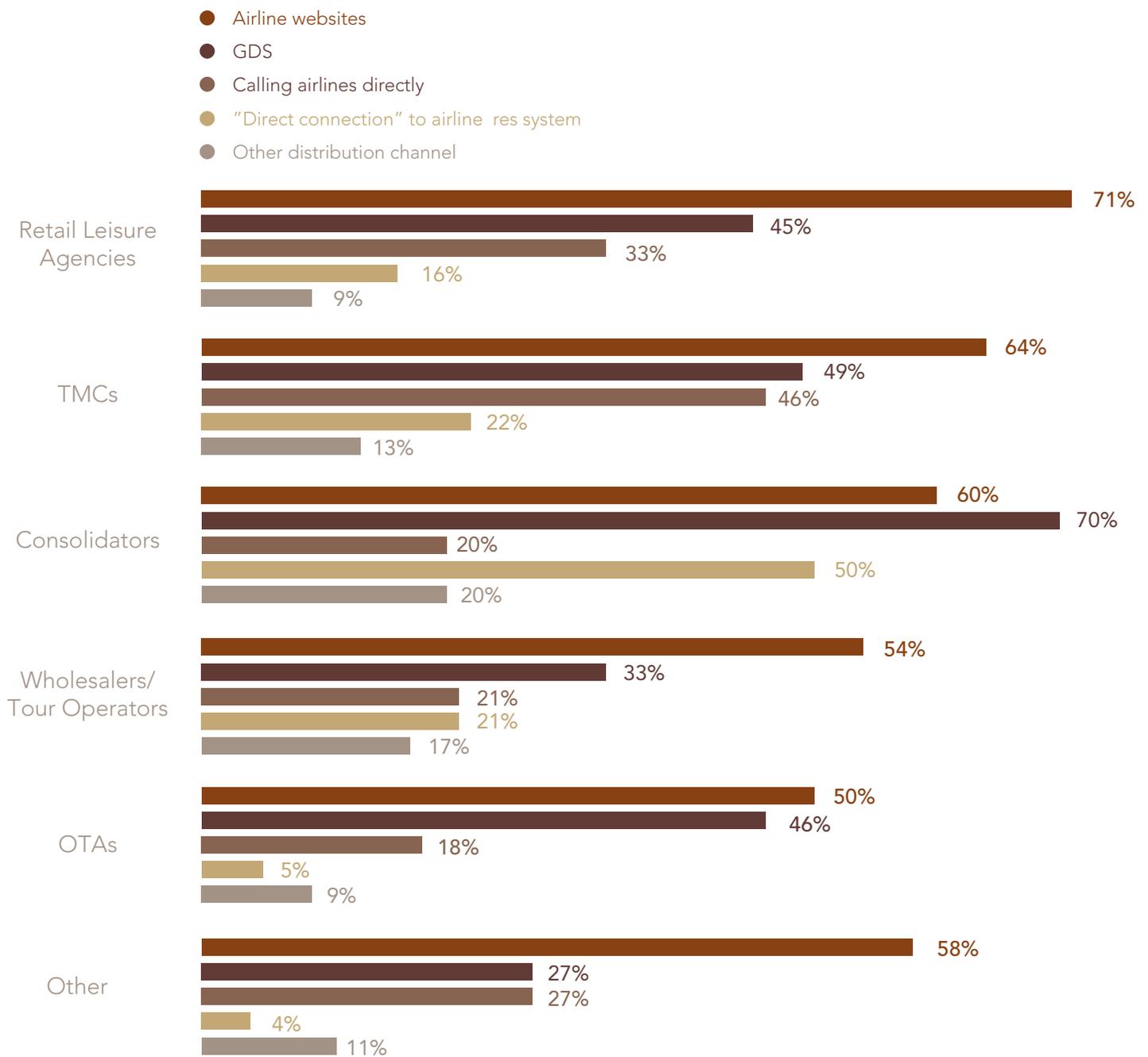
Figure 7: TMCs Are the Agency Sector Most Likely To Sell Airline Ancillary Products

● Percent of agencies that sell airline an ancillary products

TMCs 87%

Retail Leisure Agencies 76%

Wholesalers/ Tour Operators 61%

Consolidators 45%

OTAs 44%

Other 78%

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group

Figure 8: Agencies Use Airline Websites Most To Book Ancillary Products

Channels agencies use to book airline ancillary products (multiple responses accepted)

- Airline websites
- GDS
- Calling airlines directly
- "Direct connection" to airline res system
- Other distribution channel

Retail Leisure Agencies
- 71%
- 45%
- 33%
- 16%
- 9%

TMCs
- 64%
- 49%
- 46%
- 22%
- 13%

Consolidators
- 60%
- 70%
- 20%
- 50%
- 20%

Wholesalers/ Tour Operators
- 54%
- 33%
- 21%
- 21%
- 17%

OTAs
- 50%
- 46%
- 18%
- 5%
- 9%

Other
- 58%
- 27%
- 27%
- 4%
- 11%

"I estimate my front-line agents lose between up to two hours of productivity going to airline websites to book seats and take care of other client requests, and to enter these transactions in our mid-office system. This isn't sustainable."

CEO, regional travel agency, USA

This is why we believe the results of the study point to the critical nature of NDC to the global airline industry. With NDC, airlines can, at last, help evolve the traveller's purchase decision in indirect channels from being based strictly on price, rendering airlines as substitutable commodities, to overall value based on factors such as airports, schedule, amenities, journey cost – not to mention the value of the brand. Price will always be a decision-making criteria, but it need no longer be the lead or sole criteria.

AGENCIES SAY AIRLINE WEBSITES HAVE UPPER-HAND SELLING BRANDED FARES AND ANCILLARIES

As a result of the many complex factors that have affected their businesses, it's understandable that travel agencies – in particular, retail agencies, which tend to be smaller – state they are at a competitive disadvantage to airline websites to sell both "Branded Fares" and airline ancillary products *(see Figure 9-1 and Figure 9-2)*.

Figure 9-1:   Agencies Believe They Are At A Substantial Disadvantage To Airline Websites To Sell "Branded Fares"

How agencies perceive the ability to compete with airline websites to sell "branded fares"

- OTAs: 56%, 44%
- Retail Leisure Agencies: 2%, 1%, 26%, 38%, 33%
- Wholesalers/Tour Operators: 29%, 29%, 43%
- Consolidators: 13%, 12%, 50%, 25%
- TMCs: 1%, 9%, 23%, 29%, 38%
- Other: 10%, 10%, 19%, 38%, 24%

Legend:
- We are at an extreme disadvantage
- We are at a moderate disadvantage
- We are equally competitive
- We have a moderate advantage
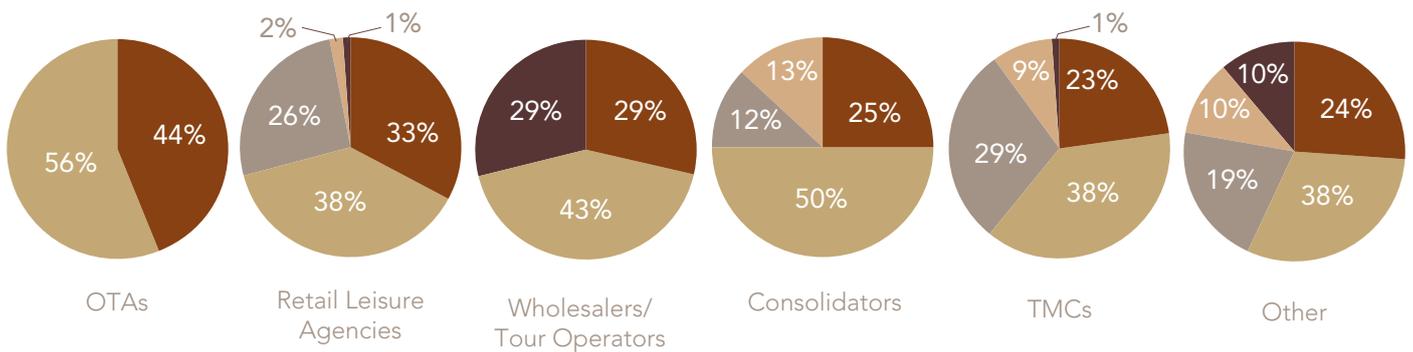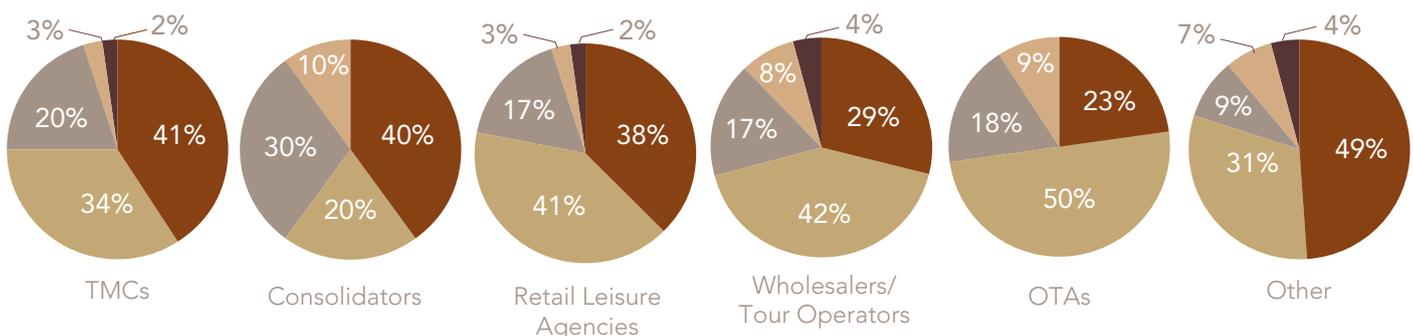- We have a substantial advantage

Figure 9-2:   Inability To Access Airline Ancillary Products In GDSs Puts Agencies At Disadvantage To Airline Websites

How agencies perceive the ability to compete with airline websites to sell airline ancillary products

- TMCs: 3%, 2%, 20%, 34%, 41%
- Consolidators: 10%, 30%, 20%, 40%
- Retail Leisure Agencies: 3%, 2%, 17%, 41%, 38%
- Wholesalers/Tour Operators: 4%, 8%, 17%, 42%, 29%
- OTAs: 9%, 18%, 50%, 23%
- Other: 7%, 4%, 9%, 31%, 49%

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group

Agency executives don't like this fragmentation. Agencies view having to use multiple channels to book air and ancillary products as counterproductive, and aren't pleased with the additional effort required to integrate non-GDS transactions into their mid- and back-office systems.
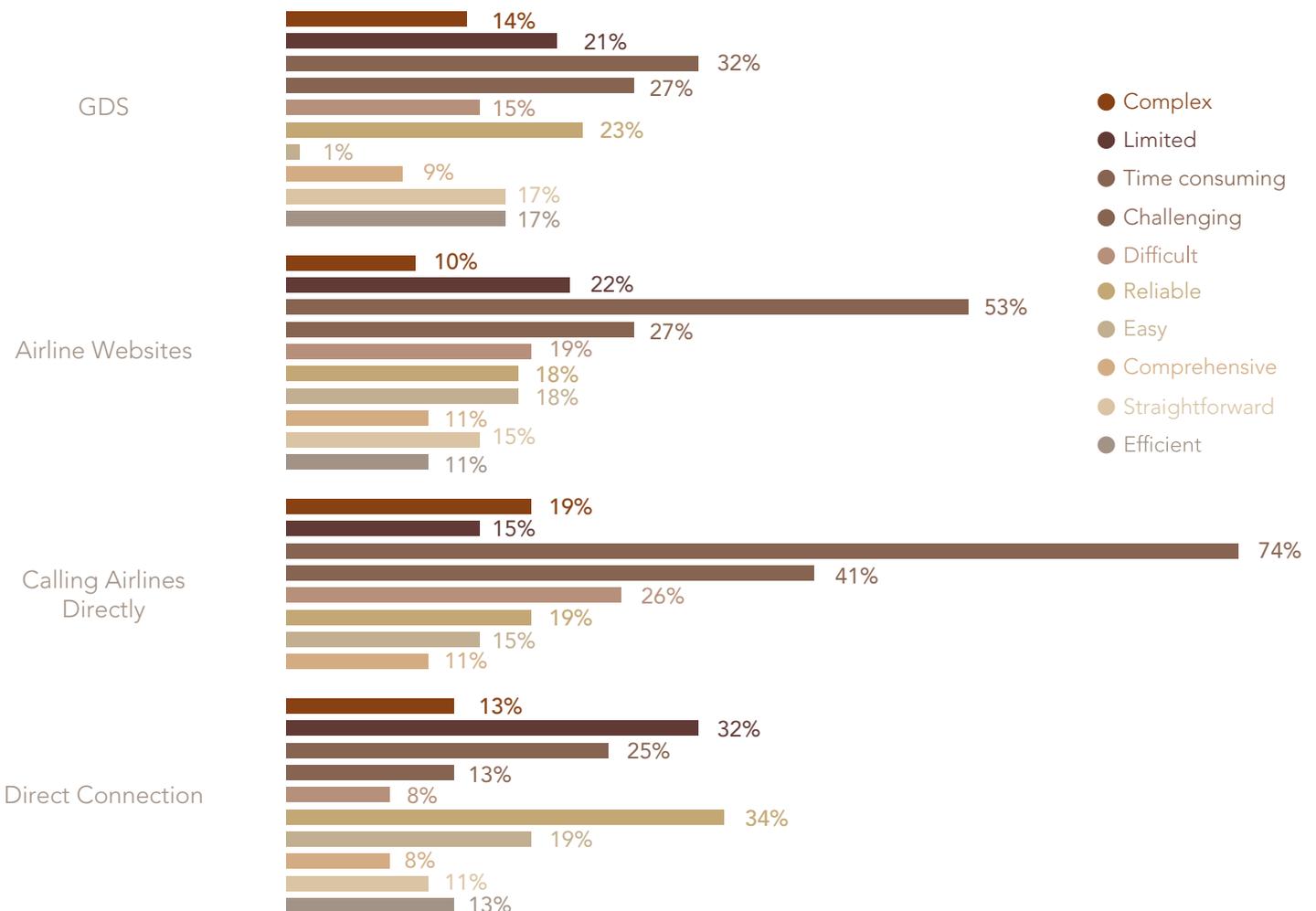
"In an ideal environment, we will have something that is GDS-agnostic and mid-office system agnostic, and that will pull everything we need from all those systems into a front-end system that is completely seamless for our agents and completely seamless for our travellers." - **Group manager, diversified travel company, New Zealand**

Booking airlines' "Branded Fares" and ancillary products has produced extensive frustration and unhappiness across the travel agency community toward the various distribution channels they use to book these products *(see Figure 10-1 and Figure 10-2)*. When asked to describe GDSs, airline websites, airline call centres, and airline "direct connect" links, agencies are more likely to use negative terms than positive ones.

Figure 10-1: Agencies Have Few Good Things To Say About Airline Direct Channels To Book "Branded Fares"
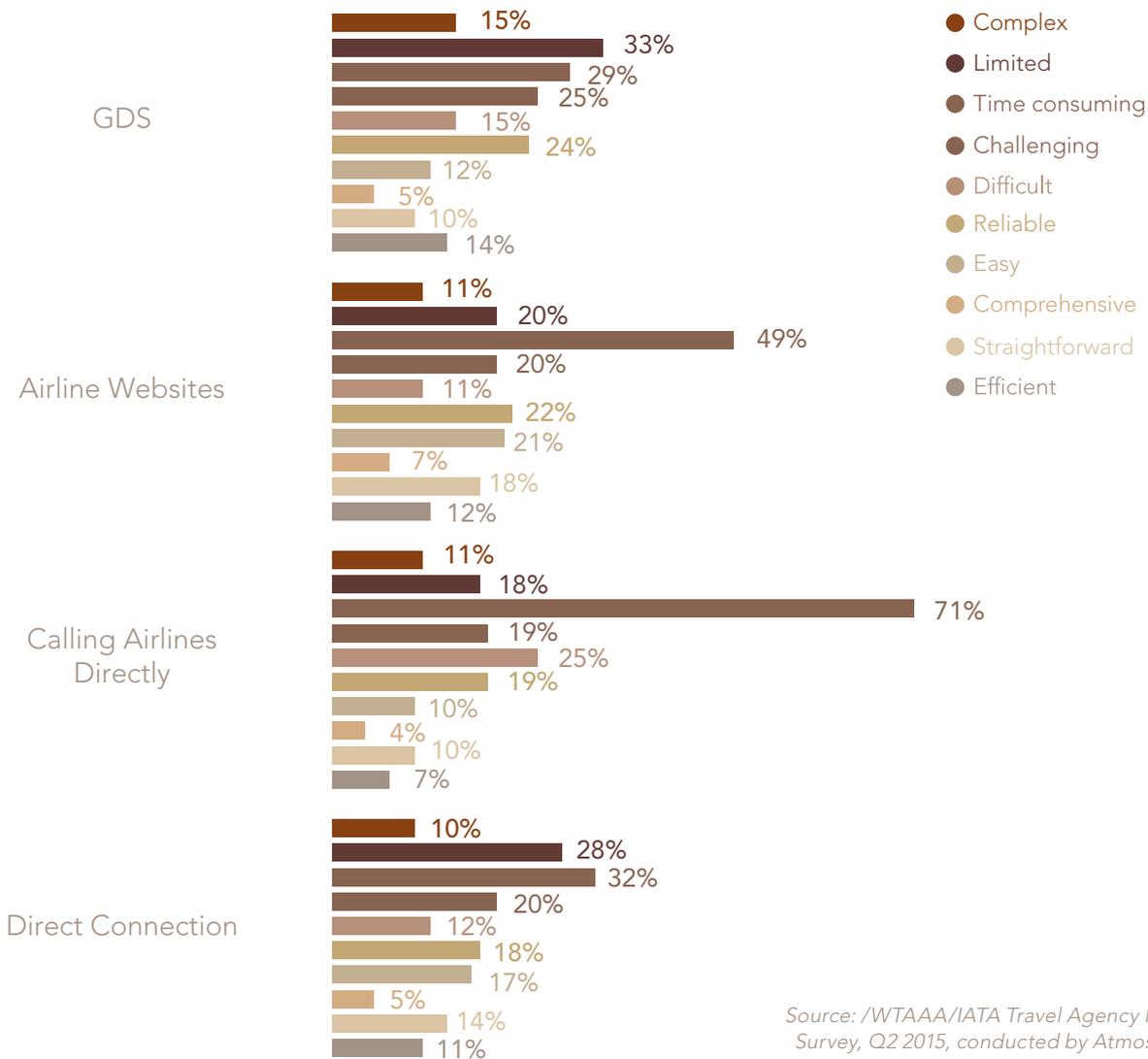
"How would you describe the process of booking airline "fare families" or "branded fares" through the distribution channels your agency uses?"

Legend:
- Complex
- Limited
- Time consuming
- Challenging
- Difficult
- Reliable
- Easy
- Comprehensive
- Straightforward
- Efficient

GDS
- Complex: 14%
- Limited: 21%
- Time consuming: 32%
- Challenging: 27%
- Difficult: 15%
- Reliable: 23%
- Easy: 1%
- Comprehensive: 9%
- Straightforward: 17%
- Efficient: 17%

Airline Websites
- Complex: 10%
- Limited: 22%
- Time consuming: 53%
- Challenging: 27%
- Difficult: 19%
- Reliable: 18%
- Easy: 18%
- Comprehensive: 11%
- Straightforward: 15%
- Efficient: 11%

Calling Airlines Directly
- Complex: 19%
- Limited: 15%
- Time consuming: 74%
- Challenging: 41%
- Difficult: 26%
- Reliable: 19%
- Easy: 15%
- Comprehensive: 11%

Direct Connection
- Complex: 13%
- Limited: 32%
- Time consuming: 25%
- Challenging: 13%
- Difficult: 8%
- Reliable: 34%
- Easy: 19%
- Comprehensive: 8%
- Straightforward: 11%
- Efficient: 13%

Figure 10-2: Agencies Have Few Nice Things To Say About Any Channels' Usefulness To Book Airline Ancillaries

"How would you describe the process of booking airline ancillary products through the distribution channels your agency uses?"

Legend:
- Complex
- Limited
- Time consuming
- Challenging
- Difficult
- Reliable
- Easy
- Comprehensive
- Straightforward
- Efficient

GDS
- 15%
- 33%
- 29%
- 25%
- 15%
- 24%
- 12%
- 5%
- 10%
- 14%

Airline Websites
- 11%
- 20%
- 49%
- 20%
- 11%
- 22%
- 21%
- 7%
- 18%
- 12%

Calling Airlines Directly
- 11%
- 18%
- 71%
- 19%
- 25%
- 19%
- 10%
- 4%
- 10%
- 7%

Direct Connection
- 10%
- 28%
- 32%
- 20%
- 12%
- 18%
- 17%
- 5%
- 14%
- 11%

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group

NDC's value proposition is focused on its ability to help agencies compete with airlines' direct distribution channels on a more level playing field. Today, a travel agent booking a flight is most likely to use the native, or character-based, "green screen" display to search for and book airline ancillaries, because agents find processes in the green screen mode more efficient than those available in the graphical user interface (UI) "agent desktop" displays, such as Sabre Red and Travelport's Smartpoint *(see Figure 11)*.

The trouble is, retailing airline ancillary products isn't as easy or as compelling in the green screen display as it is in a graphically-rich environment like an agency desktop solution. As NDC-enabled processes are developed, NDC providers must create ways to present airline products and offers, and allow agents to search for and book those products in both the "green screen" mode and the more graphically-rich agent desktop UI modes. The newer generation of agency desktops are starting to demonstrate hybrid screen displays mixing both the "green screen" with graphical elements.

Figure 11: Agencies' Reliance On "Green Screen" Display To Access Air Content Makes Airline "Retailing" Difficult

"How does your agency search for and book ancillary products in the GDS?"

Legend:
- ● GDS "green screen" (standard) display
- ● GDS agent desktop applications
- ● Agency proprietary solution
- ● I don't know

Retail Leisure Agencies
- GDS "green screen" (standard) display: 53%
- GDS agent desktop applications: 45%
- Agency proprietary solution: 2%
- I don't know: 14%

TMCs
- GDS "green screen" (standard) display: 60%
- GDS agent desktop applications: 48%
- Agency proprietary solution: 5%
- I don't know: 7%

Consolidators
- GDS "green screen" (standard) display: 57%
- GDS agent desktop applications: 29%
- Agency proprietary solution: 29%
- I don't know: 14%

Wholesalers/Tour Operators
- GDS "green screen" (standard) display: 27%
- GDS agent desktop applications: 50%
- Agency proprietary solution: 13%
- I don't know: 25%

OTAs
- GDS "green screen" (standard) display: 80%
- GDS agent desktop applications: 10%
- Agency proprietary solution: 20%
- I don't know: 10%

Other
- GDS "green screen" (standard) display: 58%
- GDS agent desktop applications: 33%
- I don't know: 40%

DISTRIBUTION-RELATED FRUSTRATIONS CLARIFY WHAT AGENCIES WANT FROM NDC

Our interviews with travel agency executives made it clear that they feel NDC providers have not yet provided an acceptable level of detail regarding how they intend to bring NDC to market.

"We keep asking our GDS and airline reps for specifics about NDC, and all we get are blank stares and 'I don't know's.'" – **Owner, diversified agency group, South Africa**

"Will NDC require us to make changes to our processes? Tell us, so we can start to prepare." – **Managing Director, retail leisure travel agency, UK**

"My colleagues who manage our airline supplier and GDS relationships tell me their questions about NDC are answered with the equivalent of a pat on the hand and a 'there, there, don't fret your pretty little head about this' type of response. How am I supposed to understand what and how I need to prepare with that kind of attitude?" – **Owner, retail leisure agency, USA**

Agencies want and need NDC to be simple, intuitive, and manageable. Although we don't yet know all details about NDC, some good news exists. Some travel agencies already use "NDC-like" processes to search and book flights. For example, when an agency books a low-cost carrier via a GDS, the agency follows a path and processes that are similar to those NDC may use. Agencies that currently use an airline API, such as those offered by Air Canada, American, British Airways, and United, to search and book flights and airline ancillary products in GDSs are also using "NDC-like" processes.

Agencies in our study were very clear that they do not want radical overhauls to their flight searching and booking processes once NDC is launched. Thankfully, they won't have to, because NDC is not intended to reinvent the wheel.

Rather than dismiss agencies' discontent, NDC providers need to recognize and appreciate that agencies' dissatisfaction actually contains helpful guidance for them. Agencies' overwhelming frustrations with the various channels to book "Branded Fares" and airline ancillary products reflects the clumsy nature of various booking processes, especially those used to book airline ancillary products. Agencies' irritations illuminate what they want and need when NDC-enabled processes are brought to market: Processes that are reliable, easy, comprehensive, straightforward, and efficient.

TRAVEL AGENTS EXPRESS LOW AWARENESS OF NDC

Airlines, GDSs, other travel technology firms, and a small number of travel agencies have been involved in the development of NDC for more than three years. Beginning in 2013, IATA, along with members of the NDC community, began to pilot various NDC schemas, a process that has continued into 2015, and will accelerate into 2016 and beyond.[3]
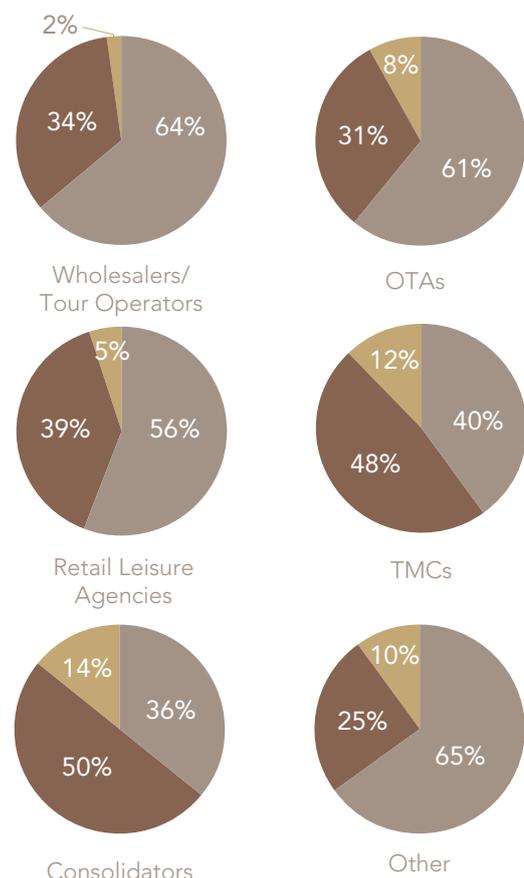
The travel agencies in our study have limited awareness of NDC *(see Figure 12)*. More than half (53%) of all agencies state that they have not heard of NDC before they took our survey. Even though TMCs and Consolidators showed the greatest awareness, between 36% and 40% of the two groups had never previously heard of NDC. Just 12% of TMCs and 14% of Consolidators were "very familiar" with NDC.

In other words, amidst all of the discussion, all of the media – particularly in trade media – all of the hype for and against NDC, agencies have not participated in the discussion about NDC, adopting a "wait and see" mindset. Why?

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group

Figure 12: Limited Agency Awareness Of NDC Indicates Need For Widespread, Compelling NDC Communications

"Before this survey, how familiar were you with the airlines' New Distribution Capabilities (NDC)?"

- ● I had not heard of NDC at all
- ● I was somewhat, but not very, familiar with NDC
- ● I was very familiar with NDC

Wholesalers/Tour Operators: 2%, 34%, 64%

OTAs: 8%, 31%, 61%

Retail Leisure Agencies: 5%, 39%, 56%

TMCs: 12%, 48%, 40%

Consolidators: 14%, 50%, 36%

Other: 10%, 25%, 65%

"I don't know that much about NDC. About a year ago, when I put my agency forward for this, I was sent a 2,700-page document that was too hard to work through, so we gave up. My understanding though is that simply put it's a replacement for the GDS." – **General Manager, travel management company, UK**

"The communication is not honest. We as Agents can stand the truth. We can handle changes and we can handle transitions to direct sales, as well as direct connect. The only thing we cannot handle is hidden agendas and political tactics." – **Vice President, leisure travel agency group, Germany**

*"I honestly have been ignoring this whole NDC thing. It seems so remote, and so un-*defined, that I haven't wanted to waste time thinking about it. I asked my GDS rep about it, after I read an article, and she told me to ignore it, that it would be years before I'd see it."* — **President, independent leisure travel agency, USA**

"I tend to focus more on our sales efforts and the business. Every few months, my CFO will either send me an article or some other update about NDC." – **CEO mid-size travel management company, USA**

A clear, essential long-term challenge for NDC providers is to deliver a singular view of what NDC is, what it means, and what its value is to each of the respective stakeholder communities.
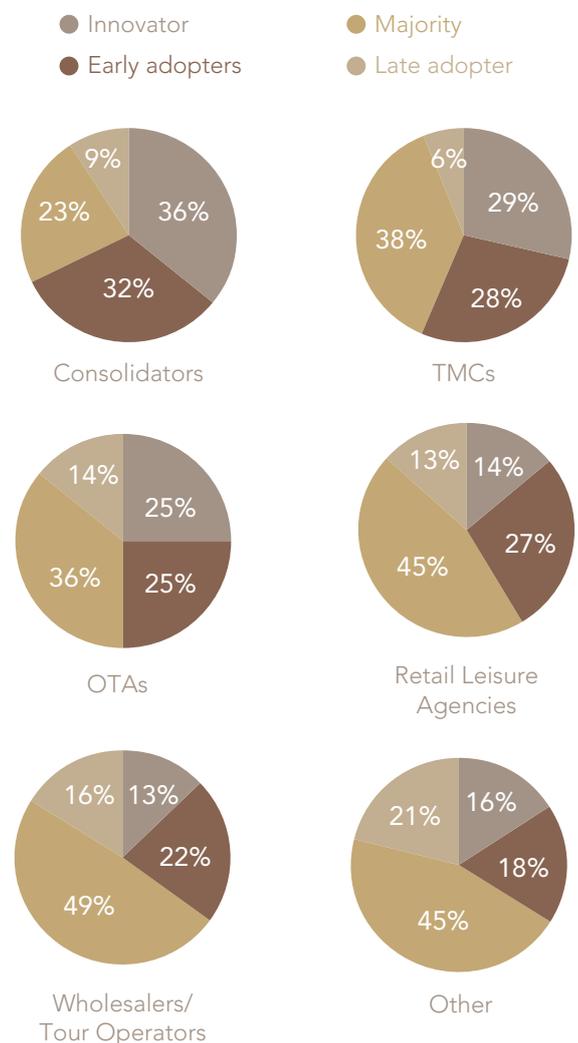
AGENCIES' APPROACH TO TECHNOLOGY MAY AFFECT THEIR ADOPTION OF NDC

Our research identified that travel agencies take a deliberately slow pace to adopt new technologies. The result of thin profit margins, limited financial resources, and limited IT infrastructure and teams, few agencies appear to be interested and willing voluntarily to invest in unknown, emerging technologies.

We asked agencies in our online survey to identify how they approach embracing new technology solutions. Agencies were asked to choose one of four different segments: Innovators, Early Adopters, Majority, or Late Adopters. A plurality of agencies – 43% – identified with the Majority segment, the group that adopts technology once it is market-tested (see Figure 13). Consolidators and TMCs are most likely to consider themselves to be Innovators, while retail agencies and Wholesalers are most likely to identify with the two slower-to-adopt groups, Majority and Late Adopters.[4]

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group

Figure 13: Agencies Are Thoughtfully Conservative In Their Technology Adoption

How agencies view their pace of new technology adoption

- Innovator
- Early adopters
- Majority
- Late adopter

Consolidators: 36%, 32%, 23%, 9%

TMCs: 29%, 28%, 38%, 6%

OTAs: 25%, 25%, 36%, 14%

Retail Leisure Agencies: 14%, 27%, 45%, 13%

Wholesalers/Tour Operators: 13%, 22%, 49%, 16%

Other: 16%, 18%, 45%, 21%

This was borne out in conversations we had with various travel agency executives:

"My business doesn't have the margins to be a risk-taker." – **CEO, retail agency, UK**

"You cannot make investments based solely on speculation." – **Vice President, leisure travel agency group, Germany**

AGENCIES VIEW GDSs AND AIRLINES AS PRIMARY SUPPORT PARTNERS FOR NDC'S INTRODUCTION

NDC providers should anticipate that agencies' limited awareness of NDC and their cautious approach towards technology adoption will likely result in their collective – though varied – reliance on their airline and travel technology partners for education, communications, and guidance to benefit from NDC. Agencies in our survey indicate they intend to rely most on GDSs *(see Figure 14).*

Why is that? Agencies view GDSs as their primary technology partner.

Why will agencies rely on GDSs, and not airlines, as their primary partner in this? After all, the airlines introduced the ancillary concept and are the catalyst to develop NDC. Airline participation in

NDC is optional. Some carriers will fully embrace it, some only partially, and some not at all. An airline's perspectives about NDC are also likely to be focused around its needs as carrier, and perhaps those of its alliance or other partners – a completely reasonable and understandable perspective.

GDSs, in contrast, have much closer, more direct relationships with their agency subscribers, and work with agencies in multiple areas within the travel industry. Travel agencies sell multiple travel products, and the GDSs provide an important technology link between agents and their various travel suppliers. GDSs also serve as agencies' primary gateways to airline content. Plus, GDSs are inherently technology firms – airlines aren't. Travel agencies bring the value of choice across product and brands, whereas airlines have a single focus on their own products and brand. The GDSs aggregate this supplier choice to travel agencies, which enables agencies to provide that broader range of options to their clients. There's an important implication for GDSs in this finding. Based on what agencies expect and need, the entire GDS community must work with the airline community, and vice versa, particularly the carriers that wish to enable NDC, to support bringing NDC to market – so that the GDS agency subscribers can benefit.

Figure 14: Agencies Will Likely Rely On GDSs Most For Support In Adopting NDC

Where agencies will turn, in rank order, for technology and connectivity support when adopting NDC

- ● GDS
- ● Airlines
- ● 3rd-Party travel technology provider
- ● Mid-/Back-Office system vendor

Retail Leisure Agencies
- GDS: 66%
- Airlines: 41%
- 3rd-Party travel technology provider: 19%
- Mid-/Back-Office system vendor: 16%

TMCs
- GDS: 64%
- Airlines: 45%
- 3rd-Party travel technology provider: 23%
- Mid-/Back-Office system vendor: 22%

Consolidators
- GDS: 59%
- Airlines: 41%
- 3rd-Party travel technology provider: 36%
- Mid-/Back-Office system vendor: 14%

OTAs
- GDS: 58%
- Airlines: 36%
- 3rd-Party travel technology provider: 28%
- Mid-/Back-Office system vendor: 14%

Wholesalers/ Tour Operators
- GDS: 46%
- Airlines: 42%
- 3rd-Party travel technology provider: 31%
- Mid-/Back-Office system vendor: 29%

Other
- GDS: 44%
- Airlines: 37%
- 3rd-Party travel technology provider: 27%
- Mid-/Back-Office system vendor: 25%

AGENCIES VIEW NDC AS A WAY TO IMPROVE THEIR COMPETITIVE POSITIONS

In spite of the controversy in travel trade media about NDC during its gestation phase and the research showing many agencies' limited awareness about NDC, agencies show a considerable amount of interest in the program.

The reason is logical: Agencies want better access to airlines' complete catalog of fares, products and offers. If NDC is the enabler to gain more and better access to this content, thus improving their competitive positions in the marketplace, then of course agencies will embrace NDC. If the expectation that has been built around NDC can, in fact, deliver more complete access to an airline's products and fares, agencies will look for this improvement to come sooner rather than later. What is most important to agencies is that they have an equal, competitive, productive and appropriate way to serve their clients against airline websites *(see Figure 15)*.

OTAs and retail agencies, which generally focus more on leisure travellers, cite NDC's potential to help them gain better access to airline content as NDC's strongest potential benefit. These agency groups believe NDC may help create a more even competitive landscape in relation to airline websites. This, in turn, may enable them to serve more travellers, and provide better service to those customers as well.

Agencies also believe NDC will help make booking airline ancillary products a more efficient process – although different agency segments have different expectations (see Figure 16). We've previously identified agencies' frustration with lost productivity that results from using various channels and screens to find and book airline ancillaries. OTAs and TMCs, which tend to be larger, more complex enterprises, are the most optimistic. They find NDC's promise to ease access to ancillary products compelling. Retail agencies, in turn, find two productivity-related benefits – the ability to access airline ancillary products via a single screen, and faster time to complete transactions – appealing.

The reserve from the travel agency community towards technology is, we believe, driven from both confusion as noted in the report and to agents' "we have seen lots of these ideas come and go" mindsets. As our Recommendations will show, this also needs to be considered during implementation of NDC-enabled processes.

Figure 15: Agencies Believe NDC Can Help Them Be More Competitive And Customer-Focused

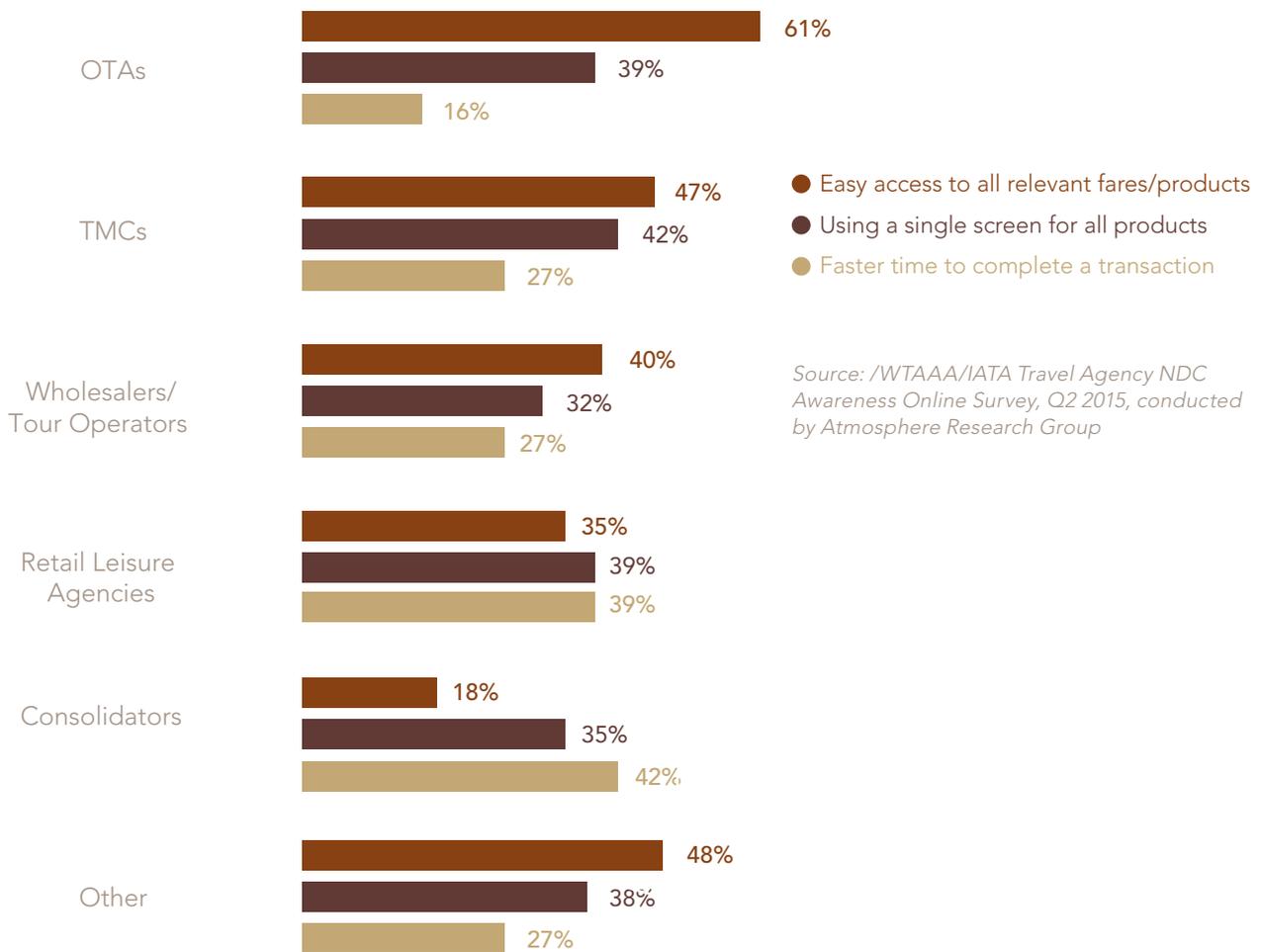Four most important ways agencies see NDC benefitting their business
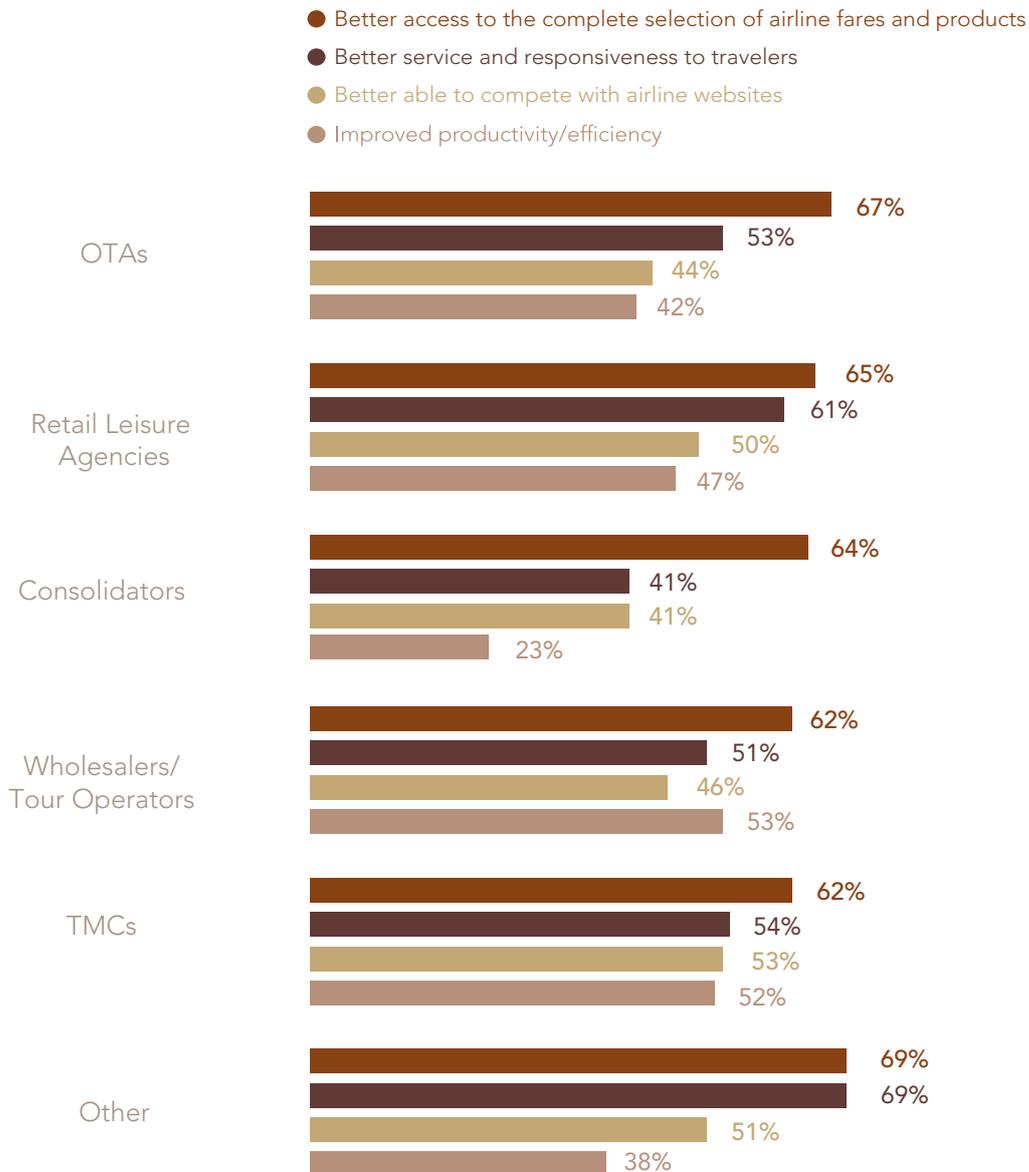
● Better access to the complete selection of airline fares and products
● Better service and responsiveness to travelers
● Better able to compete with airline websites
● Improved productivity/efficiency

OTAs
- 67%
- 53%
- 44%
- 42%

Retail Leisure Agencies
- 65%
- 61%
- 50%
- 47%

Consolidators
- 64%
- 41%
- 41%
- 23%

Wholesalers/ Tour Operators
- 62%
- 51%
- 46%
- 53%

TMCs
- 62%
- 54%
- 53%
- 52%

Other
- 69%
- 69%
- 51%
- 38%

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group

That said, agencies aren't naïve. Agency executives acknowledge it may take time for NDC to be fully "built out." What they expect from NDC providers are processes that clearly offer a visible, tangible improvement, even if they are limited on "day one", compared to the complex processes used to search and book airline ancillaries today.

"My agents have been in this business, on average, for more than 20 years. They are all highly-experienced. Every day, they have to deal with transactions made far more complex by how the airlines have changed the way they do business. NDC seems like it could offer many benefits. Our concern is whether it will be as truly seamless as we have heard."
– General Manager, regional travel agency, Australia

Agencies' top three most important productivity benefits in using NDC to sell airline ancillary products

OTAs
- 61%
- 39%
- 16%

● Easy access to all relevant fares/products
● Using a single screen for all products
● Faster time to complete a transaction

TMCs
- 47%
- 42%
- 27%

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group

Wholesalers/ Tour Operators
- 40%
- 32%
- 27%

Retail Leisure Agencies
- 35%
- 39%
- 39%

Consolidators
- 18%
- 35%
- 42%

Other
- 48%
- 38%
- 27%

"I have been in this business thirty-five years. I have seen lots of promises made and not kept. That's how I view NDC. I've heard a lot of talk about it. I want to see results." - **Owner, regional leisure travel agency, USA**

"I'm willing to give NDC the benefit of the doubt. I know these things take time, and I recognize it will be a crawl-walk-run scenario when NDC is brought to market. What I want to see is something with the promise of being usable in a practical, productive manner." - **CEO, regional TMC, USA**

That agencies believe in the promise of NDC despite its lack of clarity is wind under NDC's wings.

The authors of this report believe this will create a reserve of goodwill that will help as NDC-based functionality is brought to market. However, this reserve of positive feelings is not a bottomless well. The study clearly shows that extensive agent education will be required. Agencies need to understand what NDC is – an enabler – and, once and forever, learn what NDC is not (a database, a system, a service, a transaction platform). Because airlines will deploy NDC-enabled processes and solutions individually, it will be important for carriers to develop plans on how to educate their agency partners about their NDC-enabled processes, and the benefits they offer. Travel agencies, in return, must anticipate that differences may exist between airlines' various NDC-enabled processes.

AGENCIES EXPECT TO BE PAID FOR NDC-ENABLED PRODUCT SALES

Nobody works for free.

We asked agencies to choose which one of four possible compensation models they'd most prefer to see used should airlines opt to pay agencies to sell their ancillary products. Although agencies view GDSs as their primary technology partner, they know that the airlines are the ultimate sellers of the product.

We believe this is why agencies' most preferred model is for airline-paid commissions *(see Figure 17)*.[5] Airline-paid transaction fees place a distant second. Whether and how an airline will choose to compensate an agency for ancillary product sales is an individual business decision for airlines and agencies.

In spite of compensation models' importance, our telephone interviews with agency executives revealed that no meaningful conversations appear to have taken place between airlines and agencies regarding any type of compensation for NDC-en-abled transactions. In our telephone interviews,

agency executives also stated no discussions had yet occurred regarding possible changes to legal agreements such as agency subscriber contracts and airline distribution agreements, covering financial compensation that may result from the NDC-enabled availability of airline ancillaries to third-parties.

Since agencies expect airlines will provide any compensation for selling ancillary products in NDC-enabled transactions, the burden of initiat-ing compensation-related discussions falls on the airlines. Compensation is, of course, a decision for individual carriers and agents. With NDC being piloted and on the cusp of commercial launch, it is imperative that airlines and agencies discuss and agree on frameworks for compensation for NDC-enabled transactions.

Although tensions have eased between the airlines and the GDSs regarding NDC in general, agencies still feel somewhat like pawns. Travel agencies account for a meaningful volume of airline sales, and should not be overlooked or mis-treated as airlines determine how they will bring NDC-enabled transactions into the marketplace.

Figure 17:   Airline-Paid Commissions Top Agencies' Preferred Form of Compensation
             To Sell Ancillaries
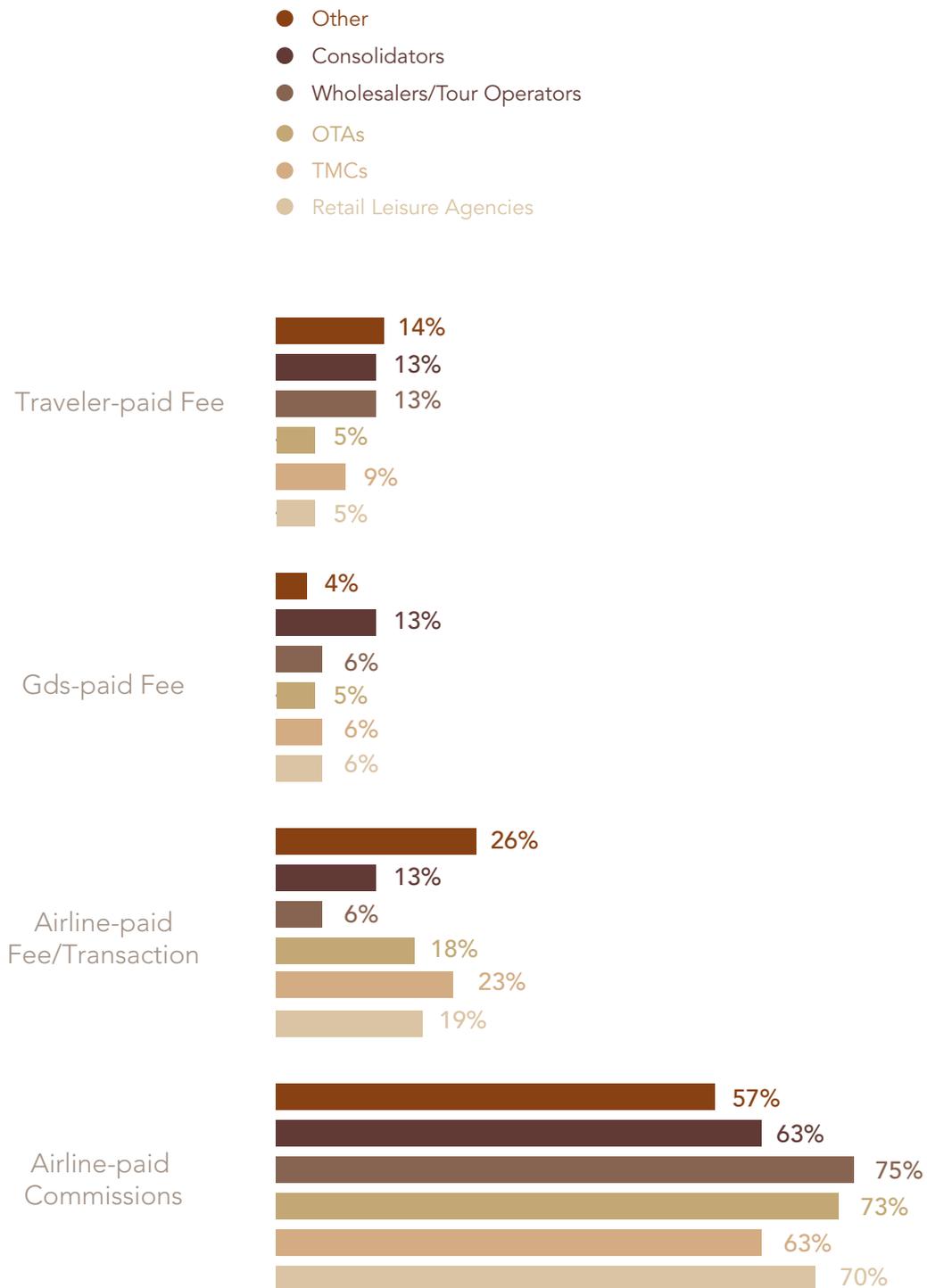
- ● Other
- ● Consolidators
- ● Wholesalers/Tour Operators
- ● OTAs
- ● TMCs
- ● Retail Leisure Agencies

Traveler-paid Fee
- 14%
- 13%
- 13%
- 5%
- 9%
- 5%

Gds-paid Fee
- 4%
- 13%
- 6%
- 5%
- 6%
- 6%

Airline-paid Fee/Transaction
- 26%
- 13%
- 6%
- 18%
- 23%
- 19%

Airline-paid Commissions
- 57%
- 63%
- 75%
- 73%
- 63%
- 70%

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group

GOING FROM VISION TO EXECUTION

Travel agencies are businesses.

And, like any business – and its employees – that are told that a new way to do business will soon be available to them, they will want to understand how the new "tool" will affect how they work, even if those changes may seem small. Likewise, they'll want to know what established, familiar processes and procedures will remain the same.

Cost, training, added complexity, and support top agencies' concerns about embracing NDC *(see*

Figure 18). These concerns aren't unreasonable; they reflect agencies' lack of knowledge about NDC which, to many agencies, remains something of an enigma.

Much of NDC will operate on the back-end, invisible to either agencies or their travellers. NDC will allow more effective air travel planning via digital channels, for both travellers and travel agents who use agency desktop applications.

Figure 18:   Agencies' Four Greatest Concerns About NDC Stem From The Fear Of The Unknown
Agencies' four top concerns about NDC
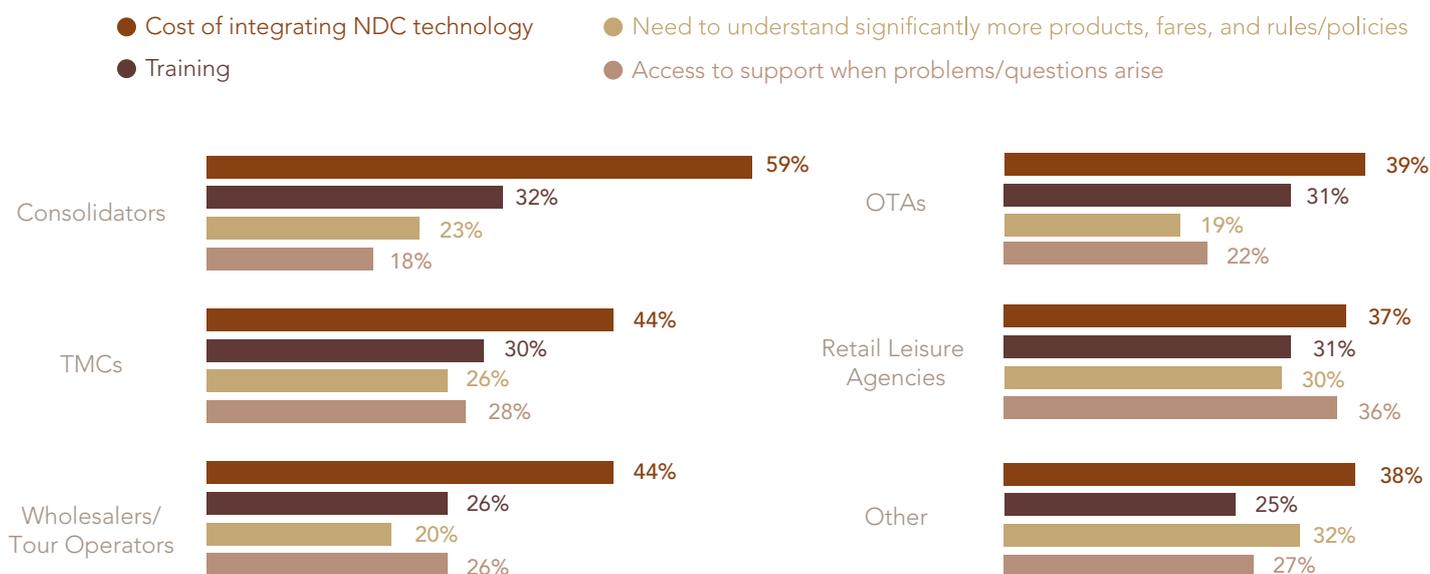
- ● Cost of integrating NDC technology
- ● Training
- ● Need to understand significantly more products, fares, and rules/policies
- ● Access to support when problems/questions arise

Consolidators
- 59%
- 32%
- 23%
- 18%

OTAs
- 39%
- 31%
- 19%
- 22%

TMCs
- 44%
- 30%
- 26%
- 28%

Retail Leisure Agencies
- 37%
- 31%
- 30%
- 36%

Wholesalers/ Tour Operators
- 44%
- 26%
- 20%
- 26%

Other
- 38%
- 25%
- 32%
- 27%

Source: /WTAAA/IATA Travel Agency NDC Awareness Online Survey, Q2 2015, conducted by Atmosphere Research Group

CONCLUSIONS: AWARENESS OF TRAVEL AGENCIES' NEEDS WILL CONTRIBUTE TO NDC'S ADOPTION AND SUCCESS

NDC is not a technology solution to a technology problem. NDC is a technology-enabler of a commercial strategy which will differ by airline.

NDC is a way to address the complexity of airline product under a common standard. This cannot be unidirectional, i.e. airlines cannot unilaterally impose unique technical standards on travel agencies outside of NDC without risking rejection by the broader travel agency community. Travel agencies, in turn, cannot unilaterally choose to not adopt NDC when technologically, economically,

legally, and logistically practical to do so.

All NDC stakeholders must remember they will solve nothing if they don't also find ways to remove the current technical, commercial, and transactional obstacles – real or perceived – that agencies believe hinder them from helping their clients. NDC's success also hinges, in great part, on the entire NDC provider community's equal willingness to embrace a more open and pragmatic approach to collaborating with the travel agency community to ensure NDC meets their, and their clients, needs.

RECOMMENDATIONS

The research conducted for this report identified five points travel agents will need from the NDC provider community as it brings NDC-enabled processes to market. Although the agency community's needs are fairly consistent, neither the community nor its needs are homogenous. Each agency segment will have distinct needs that will vary based on factors such as an agency's business focus, the country in which the agency is based and the country, or countries, where it operates, agency size, and more.

1. **COMPENSATION.** Agents in our study were clear in the opinions they shared in the survey: Agents believe they should share in the additional revenue they will help airlines earn, so it's understandable why they prefer airlines be the parties to compensate them to sell ancillaries. The "what's, where's and how's" of compensation must, for legal and competitive reasons, be determined individually between each airline and the agencies with which it does business. Airlines that decide not to compensate agencies for NDC-enabled transactions owe agencies clear, rational, and intelligent explanations for those decisions as well. The one thing airlines can't do is ignore this topic.

   Responsibility: Airlines

2. **EDUCATION.** Many travel agencies, especially retail agencies, are unfamiliar with NDC. In this vacuum of knowledge, many ideas, right, wrong, and possibly even amusingly outlandish, may be circulating. This ignorance serves no one well. To correct this, NDC providers must create compelling content and materials that provide a foundational element of understanding about NDC – what it is and what it isn't, what it will do and what it won't. All NDC providers, including GDSs, airlines, and mid- and back-office software firms, will need to educate their agency partners about their plans for NDC-enabled transactions and processes.

   Responsibility: All NDC providers and future users and beneficiaries

3. **COMMUNICATIONS.** In addition to the educational content that NDC providers will share with travel agencies, they will need to keep agencies informed of the status of their progress developing their NDC-enabled processes and bringing those to market. Because of NDC's visibility and importance in the industry, it will probably be better for NDC providers to anticipate the need to share more information, rather than less, about their development, launch, and implementation efforts and timetables. Remember that, in the digital age, there are multiple communications options: newsletters, website content sections, blogs, video blogs, social media, and more. To allow agencies to manage the frequency of communications, consider letting them choose how often they want to receive your NDC updates (e.g., weekly, bi-weekly, or monthly). Finally, there is no fixed formula for this: What and how a provider chooses to communicate its NDC efforts will, understandably, vary based on factors such as the provider's NDC strategy, budget, communications strategy, and travel agency audience.

   Responsibility: All NDC providers

4. **TRAINING.** Travel agencies were clear in their desire for training. If training will help agencies with their understanding and adoption of NDC, determine what will be most effective (this will vary by company, based on elements such as budget, training staff resources, the company's agency subscriber base, and more). Many training options exist, from formal, onsite training, to webinars, to digital, self-paced training. How an NDC provider chooses to execute its training efforts is an individual company decision.

    Responsibility: All NDC providers

5. **SUPPORT.** As with any technology-based solution, the launch of NDC won't mean the process has ended. It will have only begun. NDC providers will need to determine how to support their travel agency partners. When NDC-enabled processes are first introduced into mainstream use, and perhaps for the six months to a year following their introduction (as agents climb the NDC "learning curve"), NDC providers should anticipate agents will require a greater degree of support. It may make sense for NDC providers to offer dedicated NDC support channels – for example, telephone, online chat, and online communities. As agents' become more familiar using NDC-enabled processes, their need for dedicated support will likely diminish. As a result, NDC-specific support efforts will probably be able to be folded into other travel agency support channels.

    Responsibility: All NDC providers

CASE STUDIES: NDC IN ACTION

INTRODUCTION

To illustrate how NDC can improve airline retailing within the travel agency channel, we have created a type of "case study" – how NDC might play roles as members of a French family take two different types of trips, one for a family holiday, and the other for business, both set for some time in 2019 – just four years from now.[6]

THE LEISURE STORY

In the quiet Paris, suburb of Hauts-de-Seine, France, Elena Drevillion, a married teacher and mother of an 11-year-old girl, Sabine, and 7-year-old boy, Olivier, is finishing the packing for her family's long-planned big summer holiday to the USA. Elena and her husband Thierry, a rising, talented, mid-level bank executive, are finally taking their family on a long-promised, three-week journey to New York City, Washington, DC, and Orlando, Florida.

Thierry and Elena both belong to Aurora Airline's "Apollo" loyalty programme. Thierry has earned "Commander" elite-tier status in the program; Elena and the children are all general "Stage One" members. Elena and Thierry agreed they should not pay too much for their flights, unless doing so results in a noticeably better experience for them all. After all, the trip is really about what they do at their destinations, and not about what happens at 10,000 meters.

Even though they agreed on a budget, Thierry said that he'd be willing to consider "sensible indulgences" for their flights, such as extra-leg-room seats, priority boarding, and lounge access. He also said he'd pay to upgrade his and Elena's transatlantic flights to premium economy if the upgrade was no more than €175 per person in either direction.

Elena calls her good friend Estelle who works at a travel agency, "Voyages Des Amis," very close to where they live. Rather than meet at her office, Estelle invites Elena to meet her at a local café, where they sit down to look at all the options via the link Elstelle has to her GDS on her tablet device. Elena considers herself a good value shopper, so she has already done some initial research about flights and hotels online. Still, she likes the assistance she knows she can get from Estelle to deal with what seems to her like an ever increasingly-complex array of choices.

The most appealing itinerary starts with a non-stop Aurora flight from Paris-Charles de Gaulle to New York's JFK airport. It uses an A380, which she knows will please Thierry. Having chosen to share the family's loyalty numbers with Aurora as part of the search, Estelle points out the family receives complimentary checked baggage on Aurora and its partners due to Thierry's loyalty status. Estelle also points out icons in the itinerary that inform them the flight offers free advance seat reservations (thanks to Thierry's loyalty status), Wi-Fi (for a fee), seats with in-seat power, and free on-demand entertainment. Another icon tells Elena and Estelle that Aurora and its US partner Liberty have lounges at Paris and JFK, for which they are eligible for a discount "family pass" costing €59 per lounge.

From New York, Estelle suggests a flight on Liberty from LaGuardia Airport to Washington – Reagan National Airport (a message above the flight states "Both airports are close to their city centres, which means less travel time and more sightseeing time."). From Washington to Orlando Estelle recommends a nonstop flight on Zing!, an ultra-low-cost carrier. Estelle advises Elena that the family will have to pay extra for seat assignments, carry-on luggage, Wi-Fi, and meals, but they agree the savings are compelling enough compared to other flight options. Returning from Orlando to Paris, Estelle recommends a flight on Liberty from Orlando to JFK, on which they get to reserve seats in advance due to Estelle's agency arrangements with Aurora, and which offers Wi-Fi, priority boarding, and meals for purchase. At JFK, they connect to Aurora for their return flight to Paris-Charles de Gaulle.

Though Elena didn't know it, what Estelle showed her all used IATA NDC schemas to help airlines provide appealing, relevant offers to the travel agencies and their travellers. Both Elena and Estelle were spared trawling through the billions of bundled and unbundled flight options actually available. Thanks to NDC and the technology investment in agency based systems, what might have been a paralyzing array of choices was synthesized in a format that was easy, reliable, and fast for both Estelle to use and Elena to see.

THE BUSINESS STORY

Thierry travels every other week for his job and, to hear him talk about it, you'd think he was either a pilot or an Aurora Airlines executive. Today Thierry has been summoned to a client meeting in Istanbul on very short notice. He has less than 24 hours to make his arrangements and get to his flight.

However, Thierry knows that his company's TMC, Grand Conseil Voyages, and its self-booking tool will give him what he needs quickly and effortlessly. Within his corporate network, Thierry accesses

the travel section, and proceeds to search for flight options.

Logged into the booking tool, Thierry enters the address and the appointment time for his meeting in the Old City of Istanbul. The tool recognizes Thierry's preference for Aurora, one of his company's preferred carriers. However, according to his company's travel policies, the Paris-Istanbul route is not long enough for Thierry to be able to book extra legroom seats, so those seats are not shown to him. Thierry is, however, allowed to book an airport lounge pass at Charles de Gaulle – at the company's negotiated rate of €29. The booking tool also recognizes that Thierry's "Commander" status entitles him to complimentary priority security screening at CDG.

On the evening before his meeting, just before going to sleep, Thierry checks in for his return flight via the Aurora smartphone app, where he receives an offer from the airline. His meeting ends in the late afternoon, right in the middle of Istanbul's notorious rush hour – would he like to reserve a chauffeur-driven car "with French-speaking driver, with a USB outlet to charge his smartphone, and provisioned with bottles of water". at a special rate of €50 (versus the normal price of €65) plus 5,000 bonus Apollo loyalty points? An icon indicates this offer is within his company's travel policy.

During a break in his meeting, Thierry has Siri read an urgent message. Aurora's partner, Ottoman Air, is offering extra legroom seats for €15 apiece for his return flight from the new Istanbul airport to Charles de Gaulle. Thierry is given the option to pay for the seat using either cash or Apollo points. Without hesitation, he accepts the offer through Siri, choosing to redeem Apollo points for the purchase. Thierry's PNR is automatically updated. As the meeting resumes, Thierry smiles to himself remembering how complex this used to be just 5 years ago with much more work for him to do.

CONCLUSION

These two scenarios illustrate the three core values of what NDC can offer travellers who book through various intermediaries, including both retail agencies and TMCs:

1. Additional functionality, lead by ancillaries, to help travelers, and travel agents, search for and book flights based on what the traveler really wants and values.

2. Personalization comparable to what the traveler might receive if searching for and booking via an airline's direct channels.

3. Intelligent merchandising and retailing through the agency channel.

This all sounds good, right? Of course it does to us today. But to get to this point will require massive work by airlines and travel technology companies – driven, in part, both by airline-focused technology firms, such as GDSs, and by non-airline, new-generation technology companies, such as Apple and Google – to prepare to serve the world's travel agency community with the tools they need to succeed in an NDC-based airline distribution environment. Ultimately, it's a collaborative ecosystem change, with mobile carriers, the search system, GDSs, airlines, and other travel technology providers all interacting based on the NDC message sets.

GLOSSARY

Travel agency segments: In our online survey, participating travel resellers were asked to self-identify their type of business from a list of six options: Consolidators, online travel agencies (OTAs), retail leisure agencies, travel management companies (TMCs),, wholesalers/tour operators, and "other." We define these segments as follows:

CONSOLIDATORS: Businesses that contract with airlines to receive and sell airfares generally discounted below published fares. Consolidators sell both through retail travel agencies/TMCs and, in some cases, direct to consumers.

ONLINE TRAVEL AGENCIES (OTAs): Online travel agencies are businesses that generate the majority of their sales via the Internet, including both the "traditional" Web (e.g., via desktop// laptop computers) and via mobile sites or apps. Airline tickets are just one of the travel services OTAs sell; their other lines of business may include lodging, cruises, rental cars, vacation/holiday packages, and more. An OTA may sell published, consolidator, and wholesaler/tour operator air products, based on what it is able to negotiate. Though an OTA may operate a call centre to serve its clients, they generally do not have storefront/ retail locations.

RETAIL LEISURE AGENCIES: This category consists of "storefront" or "high-street" travel agencies that sell airfare and other travel services, including lodging, cruises, vacation packages, and more. A retail agency may sell published, consolidator, and wholesaler/tour operator air products, based on what it is able to negotiate. Retail leisure agencies sell primarily to individual consumers, and tend to focus on personal and leisure/holiday travel, though some may focus on serving business travellers. A retail agency may have an online presence, including a transaction-enabled website and/or mobile app, but generates the majority of its sales thorough its offline channels, which may include retail locations and call centres. Retail agencies include everything from single-location agencies to national travel agency chains.

TRAVEL MANAGEMENT COMPANIES (TMCs): This group is comprised of travel agencies that specialize in serving corporate travel accounts. They sell airfare as well as other travel services used by business travellers, including lodging, rental cars, ground transportation, and more. TMCs generally focus on serving mid-size and larger corporate accounts, though some may serve small- and mid-size businesses as well. TMCs include local, regional, national, and global agency businesses.

WHOLESALERS/TOUR OPERATORS: These businesses negotiate with airlines for "bulk" volumes of air inventory at discounted prices, which they generally combine with other travel services, such as lodging and rental cars and sell (with a mark-up) to others. Wholesalers generally do not sell direct to consumers. Instead, they tend to sell through consumer-facing travel agencies, including retail agencies and OTAs. A tour operator may sell "vacation packages" that include airfare, lodging, and other products direct to consumers,

and may also sell through consumer-facing travel agencies.

"OTHER": This category includes Metasearch sites (price-comparison engines), government/military agencies, in-house corporate travel agencies, general sales agents, and niche travel agencies that do not identify with any of the other categories.

BRANDED FARES: "Branded Fares" is a term used by airlines to reflect an airfare that combines, or bundles, airline-determined amenities and/or privileges, such as advance seat reservations and priority boarding, within the airfare, and which may be given a "consumer-friendly" name to aid in creating awareness among both travel agents and travellers.

FARE FAMILIES: "Fare Families" are airfares generally clustered based on a variety of airline-deter-mined functional characteristics such as advance purchase requirements, ticket refundability, and reservation change flexibility. Airlines may choose to describe their Fare Families based on either functional terms (e.g., "flex") or consumer-friendly names.

PRODUCT COMPLEXITY: Airlines used to have relatively simple products – simply different cabin classes of service (e.g., economy, business class) and various types of fares. However, as carriers have worked to meet demands from an increasingly diverse mix of consumers, respond to competitive initiatives, and improve their fi ancial performance, their products have become more complex. This complexity results from airlines introducing "fare families," "Branded Fares," individual ancillary products, ancillary product "bundles," air-and-hotel packages, and more.

ABOUT THE AUTHORS

Atmosphere Research Group is an independent, objective travel industry research, communications, and consulting firm. Atmosphere's primary focus areas are marketing (including brand, product, and loyalty), marketing and corporate communications, digital technologies, and travel industry distribution.

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T2 Impact is an independent travel industry consultancy. T2 Impact is widely acknowledged as an accelerant for travel distribution, with extensive experience in the airline sector. T2 Impact works with both start-up and established businesses seeking to enter new market segments, introduce new products, overhaul their strategies, or pioneer new approaches to travel distribution.

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1 According to a Q2 2014 Atmosphere Research online survey of 32 airlines generating sales of US$1 billion or more, the indexed yield from TMCs was more than 17% above the carriers' average, while yields for brick-and-mortar agencies was 4% above average.

2 By the end of 2015, Expedia Inc. brands Expedia.com, Hotwire, and Travelocity will begin selling American Airlines extra-legroom seats both a la carte and in product bundles that combine seating options with other airline amenities. Source: "American Airlines Deepens Its Ties With Expedia By Merchandising Seats," Tnooz, September 2, 2015 http://www.tnooz.com/article/american-airlines-deepens-its-direct-connect-with-expedia-by-merchandising-seats/

3 On September 1, 2015, NDC was validated as an industry standard. The NDC Standard has been published under the authority of the Passenger and Airport Data Interchange Standards Board (PADIS) governance, and released as a part of the PADIS regular publication schedule.

4 Agencies were asked to identify with one of four viewpoints about their professional use of technology. "Innovators" are agencies that agree with the statement "Being on the cutting edge of new technology is important to us, because it gives us a strategic advantage." "Early Adopters" agreed with the statement "We're not the first to use new technology, but we adopt it ahead of most of our competitors." Those who identify as being in a member of the "Majority" agreed with the statement "We adopt technology once it is market-tested." The fourth group are "Late Adopters", who agreed with the statement "We only implement a technology if and when it is absolutely essential."

5 The telephone interviews and online study of travel agencies were conducted before the June 1, 2015 announcement by Lufthansa Group of its plan to add a €16 (or local equivalent) surcharge to each GDS reservation.

6 All company references are fictional.