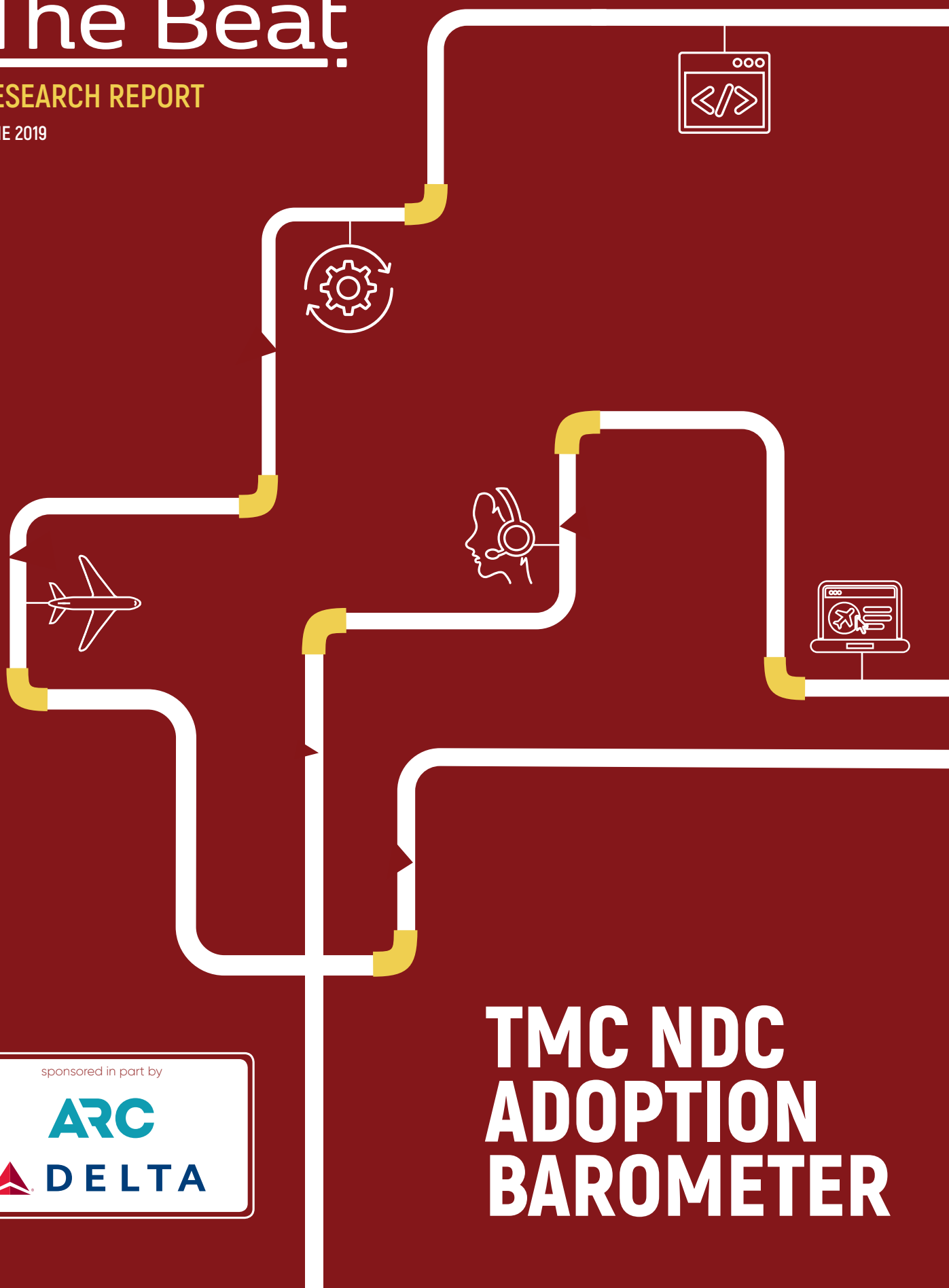
The Beat

RESEARCH REPORT

JUNE 2019



TMC NDC ADOPTION BAROMETER

sponsored in part by

ARC

DELTA

SUCCESS DRIVES SUCCESS.

We're in the business of helping you succeed. From industry-leading operations, to a sales team that's always ready to help, we aim to be your first choice among airline partners. And we're both the better for it.

PRO.DELTA.COM/CORPORATE

#1 DELTA AIR LINES
BTN
BUSINESS TRAVEL NEWS
2016 ANNUAL AIRLINE SURVEY

KEEP CLIMBING
DELTA

Dear Reader,

In October 2012, New Distribution Capability (NDC) was nothing more than a resolution on paper. At the time, it was a broad concept for how the travel industry could modernize air travel distribution—but the path to implementation was undefined.

Just a few years later, NDC has materialized, and adoption is accelerating. While we haven't yet reached a tipping point of adoption, we have reached a tipping point of acknowledgement that NDC is the next step toward a more evolved distribution landscape. As air travel retailing transforms, stakeholders throughout the value chain must prepare for a future in which the lines between direct and indirect distribution are blurred.

At ARC, we believe the future of distribution is a relationship-driven, personalized shopping experience across all channels, within all contexts—offering the right content to the right traveler at the right time. We call that future Distribution: Evolved.

NDC is a critical milestone in the future of airline retailing. That's why we are investing in new technologies, capabilities, entities and initiatives to better support this increasingly complex and data-rich environment. Through these investments, ARC is committed to helping the global travel community connect, grow and thrive.

ARC is proud to sponsor this research, as it provides our industry with a more comprehensive understanding of the current state of NDC adoption, as well as meaningful insights into its future trajectory.

Sincerely,

Mike Premo
President & CEO
Airlines Reporting Corporation (ARC)

Dear Valued Travel Partner,

Delta remains committed to driving success for you and your customers by using feedback to create solutions that make traveling and doing business with us easy.

NDC is an important topic in our industry and it helps airlines provide consistent offers across every channel. It's a technology standard that enables a single source for air travel content and allows airlines to act as the direct source of information. It empowers Delta to deliver more personalized experiences and offers, regardless of the shopping channel travelers choose.

Delta has been listening to your feedback and is aligned with travel management companies on the need to implement NDC while maintaining the existing infrastructure. We are engaged in every aspect of the NDC ecosystem and proceeding in a way that aligns with the needs of you and your customers.

We recently joined Sabre's Beyond NDC program, which is a cross-industry group working to accelerate the development, integration and testing of end-to-end NDC capabilities. This allows Delta to deliver the benefits of NDC, while minimizing disruption to TMCs and customers.

This is just one of many Delta initiatives that are driven by your feedback. We are deeply invested in our partnership with you because your success drives our success. We promise to continue to listen and deliver innovative solutions that move our entire industry forward.

As always, thank you for being a valued partner of Delta.
We hope you enjoy this research!

Bob Somers
Senior Vice President – Global Sales
Delta Air Lines

TMC NDC ADOPTION BAROMETER

The New Distribution Capability is a technology standard with a straightforward premise: to modernize airline distribution in the agency channel.

To travel management companies, however, it's anything but straightforward.

The standard's progenitor, the International Air Transport Association, says NDC is an overdue upgrade so that airlines can bridge the gap between the manner they sell through their own websites with the methods travel agencies use to distribute fares, bundles and ancillary products in their channels. To airlines, NDC lets them send richer fare and product data to agencies and better understand who is shopping. This, they say, will let them tailor airline offers, fares and bundles to shoppers, be they corporate or leisure.

The Beat this year surveyed 30 TMCs to learn how they view the NDC standard and better understand how they approach adoption and enablement.

Most TMC respondents view NDC's goal of richer airline content as a net positive.

However, as airlines, technology operators, distributors and travel agencies install the plumbing to scale adoption, some cracks have been laid bare. This has forced TMCs to cope with some practical challenges of shopping, booking and servicing NDC-type content, and spurred investment to rework agency systems to enable NDC.

Further, some airlines have hitched controversial commercial elements to their NDC strategies, from levying surcharges on GDSs to removing price points from that preferred channel. This has made TMCs wary of NDC's economic implications.

STRIVING FOR SCALE

Today, only "a very small percentage of transactions" are NDC-enabled, IATA VP Doug Lavin said in March during a U.S. Department of Transportation panel. But NDC's largest airline backers plan to turn this trickle into a gush.

IATA calls them the "Leaderboard" airlines: 21 carriers around the world that plan by year-end 2020 to process at least 20 percent of their indirect transactions through NDC-compatible application programming interfaces. They include U.S.-based carriers American Airlines, JetBlue and United Airlines as well as the three biggest airline groups in Europe.

In the prevalent distribution model, airlines file airfares and fare rules in ATPCO and file schedules in another database. A GDS then assembles these elements into the fares that are presented at the point of sale.

Instead of a database-centric flow, NDC offers a standard upon which airlines can build their own APIs—using extensible markup language—to push fares, ancillary products, rich content and other elements from their host systems to bookers using third-party channels.

That's the premise, at least. For now, the airline APIs built on the NDC standard are anything but standard. They vary in capability and speed.

While IATA's NDC schema has dozens of messages an airline could adopt within its NDC-certified API, some carriers only adopt a few, leaving gaps in functionality. Even if an airline adopted all the messages in the NDC schema, some elements aren't addressed, including airline interlining.

"The airline APIs are really good at initial shopping, offer creation and order creation," Sabre VP of product management and strategic initiatives Kathy Morgan last year told *The Beat*. "The stuff that has to happen to service, manage and account for that activity are where the gaps are."

IATA has asked airlines to build APIs that are more comprehensive, reliable and fast, in recognition that the current standard leaves some areas unaddressed.

Last fall, IATA outlined higher-level "Level 4" and "@Scale" NDC certifications for airlines and IT providers. Before their introduction, an airline had to adopt a handful of XML messages in their APIs to address shopping, booking, order creation and record retrieval to achieve the highest level. That was enough for "small-scale" deployments, an IATA official noted, "but for large scale, we'll need to use the other functions."

IATA's NDC@Scale certification demonstrates an airline and their IT providers can support volume and incorporates some messages at the prompting of TMCs.

Yet, some airlines and GDSs say certifications from IATA are mere milestones. The real work in the agency channel is to take airline APIs and make them jibe while preserving the dependability agencies enjoy in traditional channels.

Many airlines and IATA acknowledge achieving ambitious Leaderboard targets requires buy-in from TMCs.

IATA has stepped up engagement with them. Last year, it formed a senior-level TMC council to address NDC and other issues, with participation from BCD Travel, Carlson Wagonlit Travel, Corporate Travel Management and others. This group has met with IATA several times since to address NDC adoption and ensure standards account for TMC needs.

IATA's @Scale certification includes "Business Travel Ready" criteria that account for some of these requirements.

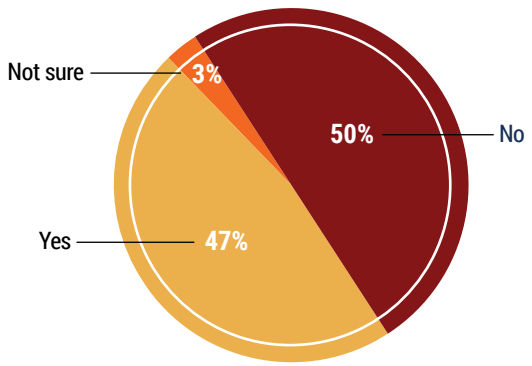
These include incorporating in the standard more post-ticket servicing elements, such as processing changes, which are more prevalent in corporate travel than in leisure.

"It has to be fit for purpose," said Caroline Strachan, managing partner of Festive Road, a consulting firm IATA enlisted to engage with TMCs. "NDC is only going to be fit for purpose once it's replicated the current way of working, including servicing. And then, from that point onward you can build on it and start to do corporate combo fares and ancillaries on top of it. But the basics have to be in place."

While evident to TMCs, this thinking hadn't been top-of-

NEARLY HALF OF TMCs HAVE PROCESSED AN NDC BOOKING

As of March 15, 2019, has your TMC processed a live NDC transaction on behalf of a client traveler?



SOURCE: Survey of 30 TMCs fielded in March-May 2019 by *The Beat*.

mind to airlines. "The industry is starting to understand the missing servicing elements," Travel and Transport executive director of corporate initiatives Kristen Pratt said. "The airlines are starting to understand that they underestimated the importance of some of that as well as the required interoperability of the mid- and back-office type systems and things that make agencies productive at what they do."

Despite a lack of NDC penetration today, almost half the TMCs responding to *The Beat*'s survey said they have processed at least one NDC transaction as of mid-March. None speaking with *The Beat* pointed to significant traction.

On average, TMC respondents expect one-third of their airline transactions within two years to conform to the NDC standard. Still, the 28 TMC respondents to that question reveal a spectrum of outlooks: One U.S.-based TMC expected 0 percent. A multinational TMC respondent expected 100 percent.

It's safe to predict NDC volume in the TMC channel in the coming years will fall somewhere in the middle.

GDS: CHANNEL OF CHOICE

In the years since IATA kicked off NDC standard design in 2012, the three major GDS operators have gone from foes to friends, from wary to won-over.

Moving beyond NDC's contentious roots, Amadeus, Sabre and Travelport have embraced it. IATA has certified each as NDC aggregators. The three major GDS operators have sundry pilot programs with airlines and agencies, and even some live NDC transactions. This year, each is making progress on respective road maps to bring NDC to life in their channels for agency customers, through desktop applications used by agents and Web services adopted by online booking tools as well as online travel agencies.

The GDSs are the preferred avenue for TMCs to shop and book NDC content. It's telling that each of the 30 TMC respondents plans to access NDC content through a GDS in the next 12 months.

"The TMCs have made it clear they want the GDSs as the aggregator," said Michael Strauss, CEO of Pass Consulting Group, which consults with agencies on software and IT. "The GDSs will be in the mix in the future simply because the TMCs want them to be in the mix."

American Express Global Business Travel, BCD Travel, CWT and other large corporate agencies have confirmed working with GDSs to shape, develop and test NDC distribution and workflows.

It will take some time.

"We are still, from a functional point of view, two years away from providing the same level of richness on this solution as we have on the GDS," Amadeus president of travel channels Decius Valmorbida said in May.

The world's largest TMC, Amex GBT, likes to say NDC stands for "Not Direct Connect." As such, it plans to tap GDSs for NDC content, not build its own connections.

NDC doesn't quite fit a narrative of "GDS versus direct connect," said Amex GBT director of content and distribution John Bukowski. "We see it as fare-filing/ATPCO versus API distribution, and it's not really either/or. You don't have to pick one and go down that path. The best path is to combine both of those together. Maintaining that dual pipeline will be important. That's why we're partnering with the GDSs and partnering with the airlines to figure out how to bring that to scale."

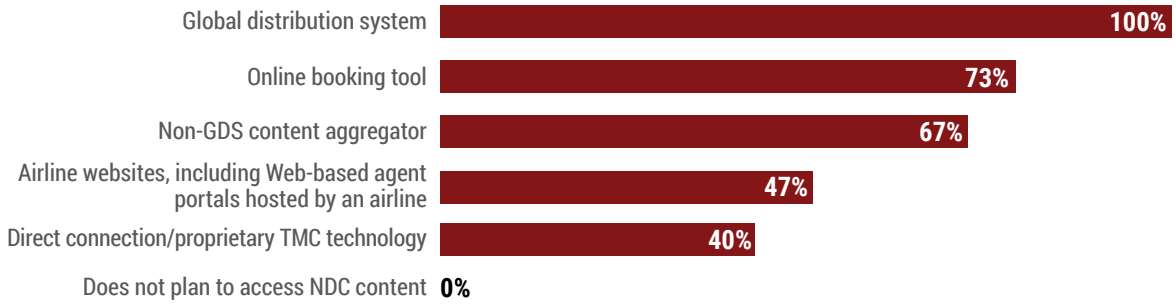
Late last year, CWT SVP of global network and technology partners Vince Chirico said the mega TMC prefers to lean on the GDSs for NDC content. While "not the sexy answer," he said, "our preferred channel will continue to be the GDSs. We see them as the only technology partners that can build a full end-to-end solution with response times that are acceptable for us and that we can plug into our back office in an efficient and scalable manner."

GDS technology is sticky. Lots of TMCs have built shopping, booking and data access workflows on these systems. It's tested, reliable.

"We can bemoan the GDSs and the way they look and how old-fashioned they appear to be, but this is a technology that transacts billions of transactions a year, that gives us sub-second search returns, that queues things intelligently and is the very heartbeat of some of our businesses," said Pat McDonagh, CEO of U.K.-based TMC Clarity Travel Management. "There's a reason why it's hard to replicate some of those things."

GDSs REIGN AS NDC CONTENT AGGREGATORS OF CHOICE

During the next 12 months, through which of the following mechanisms does your TMC plan to access airline content that aligns with the NDC standard?



SOURCE: Survey of 30 TMCs fielded in March-May 2019 by *The Beat*.

If GDS technology is sticky, the commercial model may be stickier.

In traditional distribution, an airline pays a booking fee to the GDS, which in turn shares an incentive with the agency. GDSs often include booking thresholds in terms with agencies. TMCs get per-segment cash incentives when they meet commitments. They face penalties when they underperform.

This makes agencies wary of shifting bookings to non-GDS sources.

"There's a whole bunch of considerations," said one TMC exec speaking on background while contemplating how to access NDC content. "If we took all of the airline content outside the GDS, that screws up our GDS relationships. There's a lot there we have to balance."

ONLINE BOOKING SYSTEMS: NEXT IN LINE

After the GDS, that other hallmark of travel management technology—the online booking tool—is the second-leading source through which TMCs expect to access NDC content: 73 percent of respondents planned to do so in the next year.

As the GDSs work to surface NDC content in agent desktop applications, online booking tools also are figuring out how to cope with the complexity NDC brings to their systems and for their users.

They have plotted different courses on NDC content access.

Self-booking tool providers "are taking a different direction on whether they're using a third-party aggregator, whether they're using a direct API or whether they're doing anything at all" to access NDC content, BCD Travel EVP of global supplier relations and strategic sourcing Rose Stratford told *The Beat* in November 2018. "From that standpoint, it's a little more fragmented on the OBT side."

One huge corporate booking player, SAP Concur, has leaned on aggregator Travelfusion to bring in carrier content piped on the NDC standard. Once GDSs are up and running, that could be a content source, too.

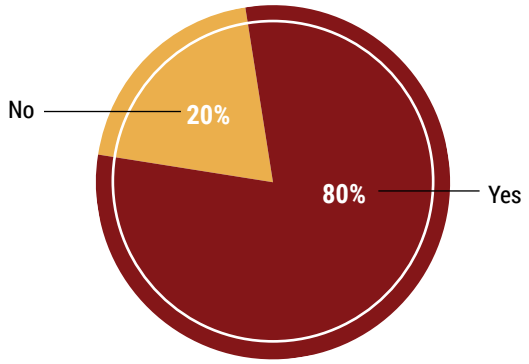
Meanwhile, Serko's Zeno has become the first online booking tool to achieve NDC certification from IATA. Zeno directly pipes NDC content from Qantas in Australia and New Zealand.

Serko CEO Darrin Grafton said that Zeno will source airline content from a blend of sources, "whether it's the GDS or a direct channel."

Beyond the question of where to source NDC content, online booking tools also must grapple with how to display it. If NDC delivers on offering richer content, personalized fare offers and an expanded set of ancillaries, these tools must make sense of this complexity in displays.

STRONG TMC MAJORITY VIEWS NDC POSITIVELY

Do you view the NDC standard as a positive development in airline distribution?



SOURCE: Survey of 30 TMCs fielded in March-May 2019 by *The Beat*.

AGGREGATORS: STOPGAP OR COMPETING SOURCE?

TMCs have other options to access NDC content. IATA has accredited two dozen NDC aggregators at some level, according to its NDC registry. They include the three major GDSs and a few local-market distribution systems like China's TravelSky and Russia's Sirena Travel.

There's a smattering of other aggregators, too, like AirGateway and Travelfusion.

The largest, Travelfusion, sees the ranks growing. "We used to have three competitors that we considered to be around," said CEO Moshe Rafiah. "We now have 15 to 17."

Large online travel agencies, TMCs and corporate booking tools already use Travelfusion to access NDC content from full-service carriers.

Among them, CWT confirmed using Travelfusion to access some Lufthansa Group content outside of GDSs. BCD Travel also has looked to non-GDS aggregation to get such content.

Travelfusion began as an aggregator of low-cost carrier content. That still is the bulk of its aggregation business, but NDC bookings are on the rise. Rafiah claimed Travelfusion handled 100,000 NDC bookings in April. Further, he claimed, NDC transactions via Travelfusion were growing 20 percent month over month.

"We have 42 agencies that are live with us on NDC, and we have 32 live NDC carriers that are available," he said in May. "Because of our content coverage, which is immediately available today and proven, we'll go live increasingly with both TMCs and corporate entities on the online booking tool."

Rafiah understands GDSs are "the comfort zone" for TMCs.

Some TMCs like BCD position non-GDS aggregation as a stopgap to get content they need now.

Some TMCs see the role of the non-GDS aggregator lessening in the corporate space once GDSs get into full production. They say tapping aggregators disrupts workflows and adds cost to the agency.

Further, several non-GDS aggregators like AirGateway and Travelfusion charge agencies to book NDC airline content. Some TMCs swallow the fee to get content not available through the GDS or to avoid surcharges that some large carriers have levied on GDS bookings, especially in Europe.

AirGateway CEO Jorge Diaz doesn't expect the airlines to deal on the same economic terms as in the past, "so this means that GDSs will need to reinvent their core business and, yes, start charging the travel agent for their sold segments."

If that prediction comes to pass, "We will be very happy to compete in pricing with them when this happens," he said.

Travelfusion's Rafiah agreed.

"When the GDS comes to [the agency] and says, 'In order to get the Lufthansa Group content, you'll need to pay us some money,' and 'These workflows will work in a different way,' I think the gaps will start emerging and tension will start building," said Rafiah.

IATA has certified Atriis as an NDC aggregator. Yet, CEO Alon Meisels said aggregation is a minor facet of what Atriis does. The company builds agent point-of-sale and corporate self-booking systems for TMCs. It also builds connections to "the ecosystem of the travel agency," including mid-office, back-office, profile and expense reporting systems, said Atriis chief revenue officer Omri Amsalem.

Meisels said Atriis has built an "intelligent switchboard" that lets TMCs manage content from multiple sources, whether those are direct connections to airlines enabled by Atriis, non-GDS aggregators like Travelfusion or the GDSs themselves.

U.K.-based TMC Gray Dawes uses Atriis technology and also has engaged with Travelport on NDC.

"We've got a decision to make down the line," Gray Dawes commercial director David Bishop said this year. "At the moment, we don't know which is the best way. Is it taking the content directly through Atriis on direct connects, or is it plugging everything into the Travelport API?"

DIRECT CONNECT: FOR THE FEW

Fewer than half of the TMCs respondents planned to build their own direct connections to airlines to get NDC content. Even the ones that did suggested they'll cherry-pick.

"I have no interest in building out these NDC pipes for 280 airlines," said Sarosh Waghmar, CEO of WTMC, a newer entrant in the TMC space. "I want to focus on the big boys, use the GDS for the rest and then bring it all into a beautiful global data warehouse."

Not all TMCs have the technology wherewithal to handle their own connections. That's why most look to partners, either GDSs or aggregators.

Yet, a few TMCs with proprietary booking technology for client travelers or their own agents have walked the direct path.

Chicago-based AmTrav operates a proprietary self-booking tool and a homegrown agent desktop. It has its own data warehouse for booking data. As such, it relies on the GDSs largely for content. AmTrav is testing some NDC direct connections with U.S.-based carriers this year.

"Like probably every other TMC, our preference is to get this from the GDS. That would be easier," AmTrav CEO Jeff Klee said. "However, I'm extremely skeptical of the GDSs getting it right in the short or medium term. Because of that, we're talking to most of the airlines and playing around with whatever they have through a direct connect."

Australia-based Corporate Travel Management hasn't waited, either. CTM uses its homegrown aggregation and booking technology to connect. Home-market airline Qantas is confirmed.

CTM also is "working closely" with Sabre, CTM founder and managing director Jamie Pherous told *The Beat* last year.

"There's still going to be a big gap between when the GDSs are going to be fully compliant," he said. "We took the choice that we can't sit back and wait. We'd rather be on the front foot."

Pherous still expects its GDS to remain CTM's dominant source of airline content.

AIRLINE PORTALS: BREAK IN CASE OF EMERGENCY

Several airlines, including Lufthansa Group carriers and British Airways, have launched online portals targeted at travel agents to book and service NDC content.

While just shy of half of TMC respondents expected to access airline content through such portals, those speaking with *The Beat* said this is suboptimal: Going to a separate website to shop and book a single carrier denies agents comparison shopping and takes them out of workflows.

As such, many TMC agents use these sites on a limited, ad hoc basis, TMCs said.

Wider availability of NDC content through more integrated channels should put a stop to this practice in corporate travel, some larger TMCs noted. Even the airlines operating such sites, including Lufthansa, say the portals are better suited for smaller agencies.

'A HALF-BUILT HOUSE'

In November 2018, Amex GBT, BCD, CWT, Egencia and 11 other TMCs signed an open letter on NDC. They were responding to a group of travel buyers who urged them and other corporate travel players to "do more" to advance NDC and account for buyer needs.

The TMC signatories likened NDC to "a half-built house." They wrote: "It is our job, with our technology providers, to deliver a fully built house. A house that is better than the one we had before."

Construction takes investment. Among TMC respondents, 83 percent already have invested in technology, either by upgrading current systems or adopting new ones, to book, manage and/or service NDC-based airline content.

In IATA's view, TMCs fall into a few types of "technology cultures" when it comes to NDC. On one end of the spectrum are those with a "GDS-based IT" tech stack. "This group is moving slower because of large and complex IT," IATA noted.

On the other end are those with "insourced IT." Such TMCs "consider themselves as IT players and have built their own platform." IATA views these agencies as more nimble when working in an NDC environment.

Whether tapping a GDS, non-GDS aggregator or going direct, the initial point of NDC content access is one challenge. It's a single room in the so-called half-built house.

TMCs must handle far more than shopping and booking. They need to preserve comparison shopping across airlines in agent-facing as well as traveler-facing channels. They have to apply policy and business logic as part of obligations to their corporate clients. They have to process changes, exchanges and cancellations. They have to access post-ticket information to provide data reporting and analytical capabilities. Further, TMCs pass booking data to traveler risk management tools, expense reporting systems and other systems to deliver on the complex mission of managing travel.

One TMC respondent noted that NDC introduces "complexities" regarding "downstream data [flowing] into mid-office, risk management providers, and back-office reporting, invoicing and reconciliation."

In May, Amadeus announced online travel agency operator Travix has been tapping Amadeus Web Services to transact NDC content for a few airlines. "It makes sense to start with a sophisticated OTA," Amadeus' Valmorbida said. Travix, for example, operates its own technology core and, unlike TMCs, has fewer chokepoints.

The typical TMC has many more integration points, adding complexity, including third-party online booking tools, mid-office, back-office and other systems. "TMCs have many more vendors as part of their IT stack, so there is a lot more integration work that needs to be done," Valmorbida said.

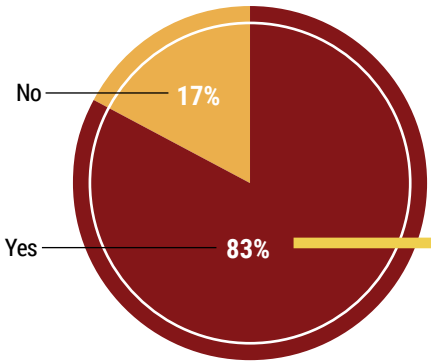
Amex GBT's Bukowski agreed. "The shopping, booking and paying is usually the easier part," he said of NDC. "The more difficult part is everything after that: All of the servicing, how the reservation flows in through the mid- and back-office today. A lot of that is based on PNRs."

On this note, many TMCs use passive segments on the GDS to store records for non-GDS bookings for itinerary management and data reporting.

Even NDC bookings processed by Travelfusion often end up as passive segments. For these, "there are lots of gaps," said Rafiah. "The ticket number is not sent. The enhanced data is not sent. Some things are missing in the workflow,

TMCs INVEST TO MAKE NDC A REALITY...

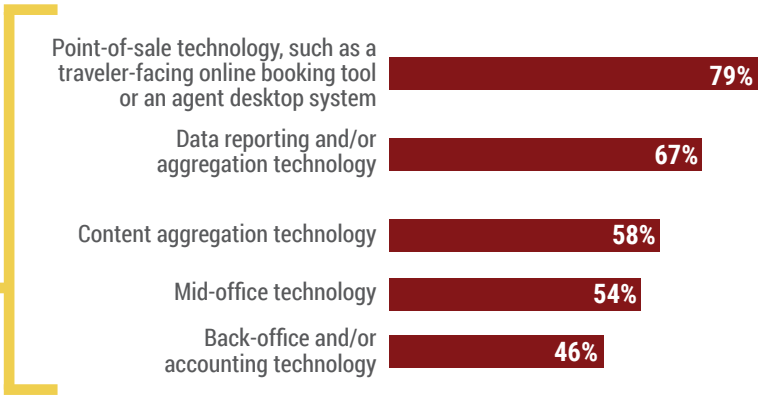
Has your TMC invested in technology, either by upgrading current systems or adopting new ones, to book, manage and/or service NDC-based airline content?



SOURCE: Survey of 29 TMCs fielded in March-May 2019 by *The Beat*.

... WHICH MEANS UPGRADES TO BOOKING, DATA REPORTING AND AGGREGATION SYSTEMS

For those who have, in which areas have you invested?



SOURCE: Survey of 24 TMCs fielded in March-May 2019 by *The Beat*.

which still relies on this crazy GDS and mid-office flow. The information simply gets broken or not sufficiently sent for the TMCs to get all the data."

Travelfusion is working on solutions, as are GDSs, mid-office and back-office providers.

TMCs less dependent on the GDSs—the ones IATA would put in the "insourced IT" category—claim an advantage.

"We're in a good spot because we don't use the mid-office or back-office or reporting systems that are tied to the GDS," said AmTrav's Klee. "I hear this all the time from TMCs: 'We want NDC, but it has to fit into our existing workflow.' It drives me crazy hearing that because the existing workflow is the problem. It's rigid. It's old. It's built for a different product than we're selling now."

He added: "In order for your mid-office to work, your travel policy to work and your reporting to work, if that all feeds off of the GDS—and anything you book outside the GDS has to be put into the GDS via a passive segment—those are the TMCs that are going to have a lot of problems."

Meanwhile, Sabre's Morgan said that PNR synchronization is necessary for NDC to work in the GDS and TMC environments. In the NDC flow, airlines take control of the offer presented at the point of sale to a prospective flight booker, confirm the booking and ultimately host the reservation record. Morgan said airlines will have to synch that record in agency channels for TMCs to make changes or exchanges.

IATA is in the early innings of another standard, One Order, that proposes to replace the passenger name record, airline ticket and electronic miscellaneous document, which captures ancillary purchases, with a single, retail-type order record. The realization of One Order's vision remains years away.

DESKTOP DISRUPTION

Another challenge of NDC adoption confirmed by TMCs regards the workflows for frontline agents: 86 percent of respondents flagged this as a negative.

Going outside normal routines to grab NDC content from airline websites or non-GDS aggregators affects agents' workflows. Further, Travel and Transport EVP and chief information officer Mike Kubasik said all this richer content—from a broader range of ancillaries to personalized fare bundles—won't work in the cryptic green screen environment still preferred by most agents.

"The GDSs have been working on new desktops for many years," he said. "Because a lot of this can't be done in maybe in the more traditional way, it's got to be done through new desktops."

FANNING THE FLAMES OF FRAGMENTATION

No longer confined to the alphanumeric strictures of fare filling through ATPCO, NDC should deliver a broader array of content. That includes personalized fare bundles, targeted ancillaries or pricing based on the profile of the bookers searching for a flight. Airlines also say the API-based distribution will let them provide richer data on their products, including images and video, as well as more expansive fare rules.

As TMCs grapple with booking and servicing, some fear this new, more dynamic way of airline retailing will diminish transparency and lead to price discrimination. If airlines could use NDC to make offers to shoppers based on, say, their frequent flyer status, employer or other information they know about them, will they charge more?

That's the fear of at least one TMC respondent: "Airlines could manipulate content availability and pricing" through NDC. Another expressed concerns that "NDC may allow airlines to price-discriminate."

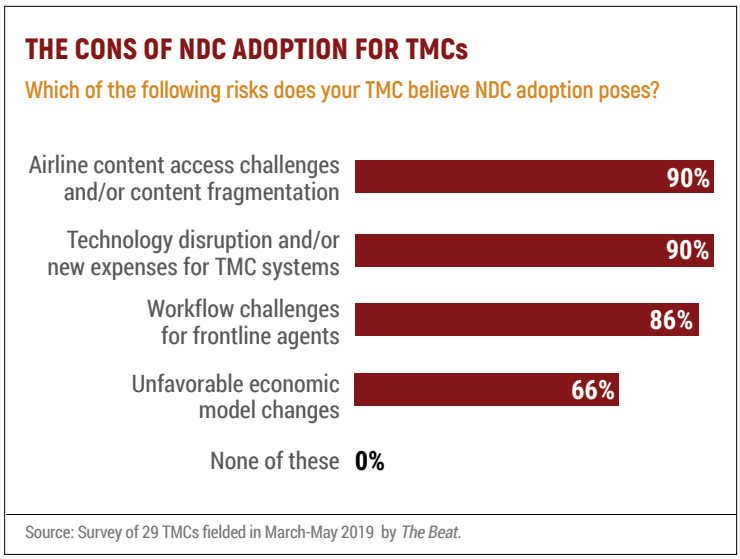
Regarding NDC as a whole, one TMC respondent took a bleak view: "We do not interpret this [as] a customer-friendly initiative. This is an airline change in distribution."

Asked to select options among a list of potential drawbacks of NDC, 90 percent of TMC respondents noted concerns about airline content access and fragmentation.

A few airlines have fanned the flames of fragmentation.

International Airlines Group carriers British Airways and Iberia have added price points for short-haul economy and business class that are available through NDC-connected channels, but not through traditional GDS connections.

Furthermore, Lufthansa Group carriers withdrew their lowest economy and business-class fares from all GDSs toward the end of 2018. They are available to agencies connecting



through NDC pipes.

Other airlines, like Finnair and Qantas, introduced programs this year that make their best available content available to TMCs only if they work with the airline through NDC-connected channels.

The largest airlines in Europe, including Air France, British Airways, Iberia, KLM and Lufthansa also levy surcharges on GDS bookings, but waive these for NDC connections.

"We have seen airlines add surcharges, remove content, price discriminate, etc., and call it NDC," wrote one TMC respondent. "That is not a positive development for the industry."

That said, airline content fragmentation is nothing new, particularly in Europe.

For years, U.K.-based Clarity has taken low-cost carrier content from non-GDS aggregators, including Travelfusion. Clarity presents these fares alongside GDS content in shopping displays through its own online booking tool and agent desktop.

McDonagh said such low-cost carrier content accounts for between 10 percent and 20 percent of its volume today.

"We've been multisource content for a number of years, because the European market has been awash with low-cost carriers," said McDonagh. "You simply cannot operate in Europe without that low-cost carrier content, which hasn't always come out of the GDS."

'THE BUSINESS MODEL IS CHANGING'

Travel agencies, once bitten when airlines in the 1990s drew down base commissions and in the 2000s through opt-in programs that compelled them to trade some of their GDS incentive revenue for "full content," might be twice shy about NDC. After all, they have felt the snap of airlines' jaws before.

It's little surprise, then, that TMCs are wary of the economic and commercial implications of NDC.

Two-thirds of respondents said NDC poses unfavorable economic model changes.

IATA's NDC initiative does not prescribe a commercial model, despite fears since the dawn of the standard that it was a Trojan horse bearing economic change.

A few airlines have introduced controversial commercial components to NDC.

These include the surcharges on GDS bookings that are waived for NDC-based bookings.

International Airlines Group carriers British Airways and Iberia, as well as Air France-KLM, have eased this transition by offering transitional "private channel" agreements for select travel agencies to continue to book through the GDS without incurring fees, with an eye toward eventual NDC connectivity.

Yet, these private channel deals differ from standard GDS distribution economics: travel agencies do not receive GDS incentives for bookings and airlines pay the GDSs reduced booking fees. Still, under this model, airlines may separately compensate agencies to offset lost GDS-inducement revenue.

Finnair and Qantas, too, have adopted private channel-type elements in their NDC commercial structures.

As for a less controversial economic element to NDC, American Airlines offers agencies connecting through NDC pipes, either directly or through an aggregator, a $2 per-segment incentive. But agencies must cover associated distribution expenses.

Amadeus' Valmorbida sees a more "sophisticated" commercial model evolving. He expects airlines still would pay a booking fee to Amadeus for NDC transactions, and the GDS would pay incentives to agencies. But he also expects a model that includes "public" and "private" elements.

"The public model means that agencies that today are Amadeus subscribers will have a certain level of commer-

cials associated from a public point of view of accessing that content," he said. "And obviously, because the whole point and purpose of NDC is a level of personalization, different agencies will have different value-adds."

Those "value-adds" would dictate the "private" elements of agency compensation, based on key performance indicators for individual airlines. Those compensation elements would be hashed out through a "three-party deal, where specific agreements are brokered between the airline, ourselves and the specific agency," said Valmorbida.

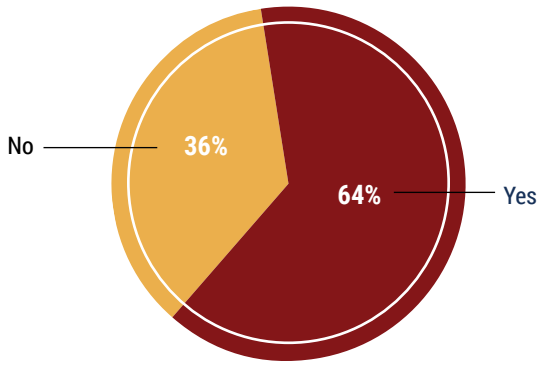
"The most controversial challenge is without a doubt changing and testing different commercial offers, using sticks and carrots," Travelport CEO Gordon Wilson said at *The Beat* Live in October 2018. "In terms of carrots, a handful of airlines are basically offering what used to be called commissions on NDC-priced tickets, [as] a carrot to use NDC. Others are offering additional frequent-flyer points when a booking is made through NDC. In many ways, I would say the private channel is a carrot because it's an incentive for the airline to change the relationship with the agency by causing the agency to not take rebates from GDSs, but they're being remunerated in other ways. It's a carrot to change the economic model. You've also got sticks. In Europe in particular, certain airlines have put surcharges on the GDS channel as a means to drive people, force people into their API or portal offerings."

On the economic endgame, Wilson put forth a sentiment expressed by others before and since: "How it plays out and where the money flows go ultimately remains to be seen. It's not an area where today there's any conclusive accommodation that's been reached across the industry, but you can rest assured that money flows are going to change."

In their open letter last November, the signatory TMCs acknowledged the uncertain commercial implications of NDC, recognizing "that the business model is changing." Yet, they wrote that "is not something we are afraid of and is no excuse for lack of progression."

MOST TMCs CHARGE CLIENTS EXTRA TO HANDLE NONCONFORMING AIRLINE CONTENT

Does your TMC charge clients an extra fee to book or handle airline content that does not conform to established workflows?



SOURCE: Survey of 28 TMCs fielded in March-May 2019 by *The Beat*.

ECONOMIC HEDGING: CLIENT COST TRANSFER

Worried that they will be the ones holding the bill, some TMCs have cost-recovery programs that NDC may trigger.

Amex GBT, BCD Travel and CWT in recent years have formalized client fee programs to cover the added costs of shopping, booking and servicing airline content that resides outside the GDS.

The three largest travel management companies aren't alone. Of 28 TMC respondents, 18 confirmed that they levy "an extra fee to book or handle airline content that does not conform to established workflows."

Some assess fees in an ad-hoc, client-by-client manner, while others have institutionalized these through published fee schedules shared with their clients.

In September 2016, Amex GBT was first to formalize a $10 surcharge on airline transactions not booked through a GDS. It also applied to airline transactions that deviated from industry settlement and fare-filing standards.

In March 2018, CWT enacted a similar fee program for non-GDS air bookings. It totaled $15 for offline and $10 for online transactions.

A month later, BCD also formalized a fee structure for non-GDS airline bookings in the price range of its competitors.

Bookings that incur such TMC fees can include low-cost car-

riers that don't sell through GDSs, as well as full-service airlines that have withheld content from the channel or have pushed a broader array of fare options through non-GDS channels.

When BCD and CWT enlisted non-GDS content aggregators to access Lufthansa Group content, each confirmed these bookings would trigger their respective fees on clients. However, as long as content—NDC or otherwise—is flowing without disruption, the fees shouldn't be triggered.

"The idea would be that NDC content should just be another source that is coming in, and it shouldn't add cost to the ecosystem," said Bukowski. "When you start looking at some of these Band-Aid solutions of 'plug this API in here for these particular fares, but everything else will come through there,' that's when you start getting additional fragmentation and those additional costs start coming in."

ON A POSITIVE NOTE

If the road to NDC adoption is lined with mid-office potholes, airline speedbumps, GDS construction and commercial detours, TMCs by and large like the destination. Among 30 respondents, 24 characterized the NDC standard as a positive development.

Among an offered list of benefits, 87 percent of these TMCs cited the ability of NDC to enable access to a broader range of ancillary airline content. The availability of airline paid seats, checked baggage and one-off lounge passes, as examples, have been limited through traditional distribution pipes.

TMCs long have desired to access such content and make it available through their channels.

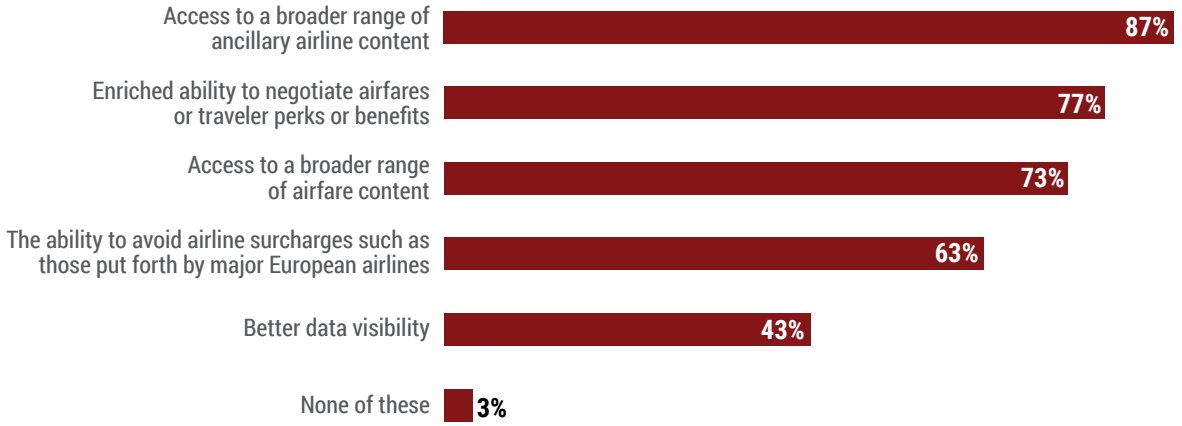
While some TMCs fear NDC will ratchet up content fragmentation, others see the opposite. One TMC exec noted fragmentation already exists, and NDC is a way to plug the gap: "The lack of full content and functionality on third-party booking tools when compared with supplier sites poses an existential threat for TMCs." To this TMC exec, "NDC is the best option that has emerged to address this problem."

Another agreed that NDC will "close content gaps with airline websites."

Yet another noted: "It enables airlines to deliver more transparent information about a traveler's purchasing options for a flight. Alongside the ability to offer a greater range of products and services to consumers, NDC also provides TMCs with an opportunity to address end-to-end airline distribution processes and deliver a more personalized travel experience. It will enable

THE PROS OF NDC ADOPTION FOR TMCs

Which of the following opportunities does your TMC believe NDC adoption offers?



Source: Survey of 30 TMCs fielded in March-May 2019 by *The Beat*.

all or nearly all products available via airline websites to be shopped, sold and serviced via agencies including TMCs."

On the "personalization" theme, 77 percent of TMC respondents indicated NDC would enrich their ability, and the ability of corporate clients, to negotiate with airlines to deliver tailored airfares, traveler perks or other benefits.

Several airlines, including American and United, say NDC enables negotiated bundles tailored to corporate clients or TMCs. If airline sourcing's past was a discount off a base fare, its future is a blend of negotiated fares, inclusive ancillaries and other services.

TMCs haven't seen this materialize at scale. "The test will come when we see the personalization coming through, and we will see whether it benefits the corporate customer, the TMCs and, ultimately, the travel industry as a whole."

"Ultimately, content is king," wrote another TMC exec. "NDC offers an omni-channel to vend air content regardless of OBT, agent assist, etc., and also provide rich metadata about the fares. Apart from this it gives us non-anonymous air search capability, something that we need for traveler personalization to work seamlessly. Our perspective on the NDC content is to procure and help our clients get the best airfare and related content regardless of the underlying mechanism or API."

One TMC took the view that what's good for the airlines is good for the industry. This TMC is along for the ride. "A healthy airline industry should be good for all of the players in the travel ecosystem," wrote the TMC respondent. "NDC is one of those initiatives that once it is incorporated as a fit-for-purpose solution in a scalable, operationalized way should provide many benefits across the marketplace."

While getting there is a pain and some TMCs grouse about disruption, expense and work to get there, Clarity takes a sunnier view.

"The TMC community in its first reactions to NDC missed the point," said McDonagh. "The point is, we should be acting in the interest of the end customers. What we want to be able to do is provide the richest possible content at the best possible price to our customers. We need NDC to facilitate that. Where it doesn't meet those requirements, we need to think about the impact on the customer and not bemoan the difficulty on the TMC." ■

METHODOLOGY

The Beat invited dozens of travel management companies to complete an online questionnaire to better understand how they approach the International Air Transport Association's New Distribution Capability standard. Respondents to an online survey, fielded in March, April and May 2019, include a wide mix of agencies, from some of the largest mega travel management companies and multinational TMCs to national and regional operators. *The Beat* supplemented information captured through this survey with interviews with executives from TMCs and technology companies, as well as consultants.

The Beat would like to thank the TMCs that completed the questionnaire upon which the research is based: AdTrav, Altour, American Express Global Business Travel, AmTrav, ATG Business Travel Management, Atlas Travel, Balboa Travel, Cain Travel, Capita Travel & Events, Corporate Travel Management, CWT, Direct Travel, Egencia, Executive Travel, Flight Centre Travel Group, Fox World Travel, Frosch Travel, Gray Dawes, Hess Corporate Travel, Omega World Travel, Ovation Travel Group, Reed & Mackay, Short's Travel Management, Tower Travel Management, Travel and Transport, Travel Inc., Travel Leaders Corporate, Travel One, TravelStore and WTMC.

PRODUCED BY

The Beat RESEARCH

BTNGROUP

JAY BOEHMER / Editor-in-Chief
jboehmer@thebtngroup.com

LOUIS MAGLIARO / Senior Vice President and Group Publisher
lmagliaro@thebtngroup.com

ANTHONY CARNEVALE / Publisher
acarnevale@thebtngroup.com

MARIZA MOREIRA / Group Design Manager

COPYRIGHT © 2019
NORTHSTAR TRAVEL MEDIA, LLC

Implement NDC with ARC

Today's evolving airline retailing landscape requires unprecedented flexibility. As the lines between direct and indirect distribution blur, one size no longer fits all.

ARC's secure and cost-effective settlement platform allows airlines and travel agencies to create customized, effectively managed partnerships that leverage New Distribution Capability (NDC).

Whether through GDSs, aggregators, direct API connections or combinations of all three, ARC brings more than 50 years of experience connecting airlines and travel agencies, enabling the technology solutions they need to grow and thrive.

Discover how ARC can help implement your NDC strategy. Visit arccorp.com to learn more.

ARC