NDC is at an inflection point of mass adoption. Not only do NDC ‘certified or capable’ companies now account for a grand total of 65 airlines, 65 system providers, but 21 of the airlines have committed to an ambitious goal of generating 20% of their indirect bookings through NDC by the end of 2020 – referenced in this document as the 20-2020 project.

The climate is optimistic with regards to this challenging quest. The surveys we conducted found that airlines overwhelmingly believe the ROI for NDC should benefit their corporate and leisure distribution partners. They also want - as their first cooperation priority - to join forces with their partners to develop promising retailing innovation.

However, while most key distribution players are motivated to bring NDC forward together, one issue remains: legacy business models, which create friction within a complex value chain and a misalignment of some business objectives and key expectations.

But NDC provides an opportunity to rethink old business models. Not all players understand how this new standard will allow them to grow profitably, but when it comes to the corporate travel side, the surveys show that two-thirds of corporate suppliers such as travel management companies (TMCs) and online booking tools (OBTs) expect NDC to improve their business results if certain conditions are met. On the leisure end, NDC has already proven itself, with leading players using it to achieve new levels of ancillary revenues and innovate e.g. through new conversational channels.

Thankfully the quest for customer satisfaction - now embraced by the vast majority of partners - reveals a fundamental foundation for a successful retailing model with NDC: focus first and foremost on travelers and their experiences.

With the right business model, NDC has the potential to both please end-users and help corporate suppliers reduce their costs and generate new opportunities. The most significant revenue opportunity, according to 87% of respondents, will be derived from retaining existing customers and winning new ones with a differentiated NDC offer. There is now a real sense of urgency around NDC adoption: 92% of corporations interviewed say they want to move to an NDC solution “as soon as it makes sense.”
The business drivers that will shape successful and profitable NDC business models are of two types:

1. **Collaboration business drivers** based on transparency, alignment, and communication.

2. **Retailing business drivers** based on flexibility, customer centricity, and value.

These drivers will allow distribution partners to demonstrate their retailing initiatives with tangible value, both upstream to their partner airlines (e.g. with NDC rich content) and downstream to consumers and/or corporate travelers (e.g. with personalized solutions).

Triggered by NDC, the resulting alignment between Airlines, Distribution Partners, Corporations, and Travelers will not only allow each player to grab a share of the pie; it has the potential to grow the pie for all. More importantly, NDC could help enable hundreds of millions of travelers to enjoy a much richer and more innovative experience - one delivered through a collaborative and innovative retailing approach embraced by all.
In October 2017, IATA welcomed a group of airlines, all of which shared strong aspirations to grow their NDC (New Distribution Capability) volumes, to the IATA NDC Leaderboard.

As of today, 21 airlines have joined this initiative. Their goal? To have NDC power 20% of their indirect sales by the end of 2020, dubbed the “20-2020” objective.

This will represent more than 80 million passengers per year, all of whom will have offers priced through solutions implementing the NDC standard. This is no small feat. Yes, it only represents a small fraction of total air traffic worldwide, but it will also be a key inflection point on the road to NDC mass adoption and potentially benefit other airlines seeking to also implement NDC solutions. Most importantly, it will provide passengers with innovation in their travel experience.

Collaboration and Innovation Are the Keys to 20-2020 Success

While it is laudable that airlines are committing to this goal, they face one major challenge in achieving it: airlines alone cannot make NDC happen. To book tens of millions of passengers through solutions implementing the NDC standard will require the support and participation of their partners. And while airlines can achieve a level of collaboration through some commercial approaches, they cannot dictate a new technology framework. They need buy-in from their distribution partners.

¹ Assuming that half of the booking volume for these airlines is indirect on a consolidated basis and based on current high-level estimates.
That is because many trade partners hold a crucial relationship with major traveler groups (e.g. indirect corporate and leisure markets). When it comes to partners such as travel agencies, online travel agencies, metasearch and the corporate market, airlines need to further collaborate if they want NDC to take off.

In short, for 20-2020 to succeed, airlines need their partners to choose to commit to NDC – and the only way that will happen is if airlines demonstrate that NDC will bring them tangible value in terms of revenue and cost-saving opportunities.

The good news is that airlines are not only fully aware of this, but completely support this collaborative approach: 93% of airlines “agree” or “strongly agree” (with two-thirds strongly agreeing) that the ROI for NDC should benefit all partners. This clearly contradicts the perception that NDC is only intended to enable airlines to control their offers. Instead, this joint effort becomes a common industry objective for all retailers to collaborate and share in this ever-increasing revenue pie.

The ROI for NDC should benefit all distribution partners.
(15 IATA NDC Leaderboard Airlines responding)

- Agree 27%
- Strongly agree 66%
- Neither agree nor disagree 7%
- Disagree 0%
- Strongly Disagree 0%
However, in an industry which has not seen a technological change of this sort since the introduction of EDIFACT itself, what are the carriers going to do to help their distribution partners understand the opportunity that this presents?

There is no easy answer, if only because of the incredible diversity in distribution players, each with a different agenda and business model. Some are IT-driven, some focus on transactions, and some are more service-oriented. Some are big and global, some regional, some are online, others offline. A majority share one trait though: they find it challenging to estimate precisely their own likely return on investment from NDC. Airlines can help with this.

Some airlines already have significant retailing experience, gained through perfecting their digital presence and tailoring their offers over the years. Many of them have also transformed their organization to merchandise more effectively while enhancing traveler satisfaction.

### Today, how important are the following NDC business drivers in reinforcing the cooperation with your distribution partners throughout the value chain?

(15 IATA NDC Leaderboard Airlines responding)

<table>
<thead>
<tr>
<th>Business Driver</th>
<th>Extremely important</th>
<th>Very important</th>
<th>Important</th>
<th>Not so important</th>
<th>Not at all important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Join forces to develop retailing innovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help your partners become retailers</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Share your distribution strategy</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement partner’s requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compensate them for ancillary sales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide both business &amp; technical support</td>
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</tbody>
</table>

Based on their experience, more than half of the airlines surveyed consider helping their partners become retailers an “extremely important” or “very important” business driver.
For too long, the industry’s infrastructure and business model has been the source of frustration. With NDC, hopes are high that all partners will be able to “join forces to develop retailing innovation”. All airlines surveyed stated its upmost importance as a cooperation business driver, with 40% stressing that this innovation quest was “extremely important”.

Why? Well, in part, it is because a majority of these airlines understand that NDC will enable their industry to catch up with other major retailing industries.

“We want to enable air-retailing throughout the value chain. We see it as an opportunity to further engage with our trade partners. In May 2018, we launched a new initiative: The “NDC Partner Program”. It supports agents on all fronts including technology, servicing, dedicated offers and strategic cooperation components.”

JOHANNES WALTER. SENIOR DIRECTOR. DISTRIBUTION GLOBAL MARKET MANAGEMENT. LUFTHANSA GROUP.

In a more dynamic distribution landscape in which multiple players provide solutions on a common playing field, collaborative and innovative retailing will become important.
Which Strategies to Focus on to Achieve 20-2020?

As it turns out, participating airlines seem to already have a clear idea of which platforms will help them drive 20% of bookings through NDC-based solutions by the end of 2020.

The majority of airlines agree that mass adoption of NDC solution is dependent on GDSs to drive the most significant amount of traffic, making them the first priority for 60% of airline respondents.

Could you estimate the ranking of your NDC bookings volume by connection type by the end of 2020?

(15 IATA NDC Leaderboard Airlines responding)

<table>
<thead>
<tr>
<th>Through GDSs as aggregators</th>
<th>Through (a) direct connection(s) (APIs)</th>
<th>Through other aggregators</th>
</tr>
</thead>
<tbody>
<tr>
<td>60%</td>
<td>33%</td>
<td>7%</td>
</tr>
<tr>
<td>13%</td>
<td>40%</td>
<td>47%</td>
</tr>
<tr>
<td>27%</td>
<td>27%</td>
<td>47%</td>
</tr>
</tbody>
</table>

1st priority | 2nd priority | 3rd priority
Interestingly, coming in second with 33%, and reflecting NDC innovation opportunities, airlines are also expecting to make their APIs and offers available not only to existing partners but also to new players. While this will open up new possibilities, it will also require distribution partners to connect and aggregate to all relevant APIs.

Other aggregators are increasingly proposing alternatives, some based on their existing aggregation framework used with other content e.g. Low-Cost Carriers (LCCs). For many aggregation using NDC APIs may represent an extension of their current distribution infrastructure to full-service carriers.

NDC solution booking volume is expected to result from a mix of sources, which will likely evolve dynamically. The choice of alternatives can only lead towards more cost-effective options, more market stimulation, and agile innovation for the passenger bookings and servicing that will be processed by solutions implementing this new standard.

### Which Critical Collaborative Partners to Secure?

Who would these “NDC-enabled” passengers be and where would they come from? Will they be travelling for leisure or business? Which shop window are they going to use to shop, buy and get services from: a metasearch, an online travel agency, a traditional brick-and-mortar agency, or a corporate tool at their office?

According to our survey, airlines consider their first NDC channel priority to be corporate business and online travel agencies, followed by metasearch.

Indeed, corporate passengers accounts for the high-yield business of airlines, and include frequent flyers and road warriors, who, reflecting the “bleisure” trend, also fly for leisure. The opportunity to cater to corporate is clear, as is the potential improvement that NDC could bring to the travel experience for corporates.

Add to these factors the size and growth rate of the overall corporate market, with a spending on business travel activity reaching $1.33 trillion in 2017 and a growth forecast of 7.1 percent in 2018 according to the GBTA BTI™ Outlook², and the reasons for a focus on corporate are clear. Of all sectors, corporate is likely the one where the impact on experience of NDC-based solutions will be most significant in the short- and mid-term.

Hence the question: what will it take to bring Corporates on board with NDC?

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Drastic Acceleration in Corporations’ Needs

The real test for NDC will no doubt be demanding corporate customers, who both pay for travel services provided by TMCs (Travel Management Companies) and OBTs (Online Booking Tools). The sheer volume of bookings cannot be emphasized enough: merely looking at the 12 corporations covered in this survey, the consolidated total travel spend is over $3 billion per year.

It therefore comes as no surprise that corporations regularly explore how to reduce costs, secure a return on investment for any new features and ensure a strategic alignment between their suppliers’ and their company’s directions. Any item that is identified as valuable will quickly find its way on to the list of requirements for their travel partners.

Corporate suppliers - TMCs and OBTs - are starting to see a requirement for NDC capabilities from medium/large corporations. NDC is “always” or “frequently” mentioned in between 25% and 40% of RFPs today, covering such areas as business model, NDC carriers, NDC capabilities, NDC certification, and NDC strategy.

Do you see NDC-business requirements or questions in business tenders/RFPs sent by medium/large corporations?
(15 corporate suppliers - TMCs & OBTs - responding)

- On enhanced business model e.g. more transparency
- On your NDC business strategy
- On NDC carriers being connected
- On your NDC certification e.g. level, functional scope
- On capabilities e.g. NDC rich content, data

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But this is just the beginning. Asking the very same questions to corporations presents a drastically accelerated picture of NDC. While only 27% of corporate suppliers mention that they frequently see NDC capabilities raised as a question in bids, 92% of interviewed corporations state that they will include NDC functionality in their upcoming RFPs.

As a standard that can be implemented for corporate travel solutions, NDC solutions would eventually be key to not only retaining current clients, but also to acquiring new ones whose current providers have failed to shift in time.

Two-thirds of corporations interviewed see NDC as a “very important” driver to address their business objectives. None of the corporations interviewed see NDC as being “not really important” or “not at all important” from a business standpoint.

Would you plan on including NDC-related business requirements or questions in your next business tenders/RFPs for your travel solutions?
(12 corporations responding - TMCs & OBTs)

- On enhanced business model e.g. more transparency
- On your NDC business strategy
- On NDC carriers being connected
- On your NDC certification e.g. level, functional scope
- On capabilities e.g. NDC rich content, data

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Looking for Speed in NDC Implementation

The next logical question is simple: how soon can corporations plan this implementation and under what conditions? 92% of corporations in this survey want to move “as soon as it makes sense, progressively through pilots e.g. specific region or selected carriers.”

In short, this means there will not be a “big bang” of implementation of NDC solutions, but rather a steady, paced deployment over time, with compromises made along the way such as:

1. Mixing content only supported by NDC-based solutions with other content, which may create display inconsistencies between rich content and naked fares. This may result in a cumbersome experience.

2. Piloting an NDC solution in one market alone, which may result in global corporations not necessarily having a globally consistent experience, including in terms of reporting and analytics.

3. Controlling rich content to avoid creating adverse side-effects, e.g. employees selecting more expensive flights because they accrue more miles.

How would you expect to adopt NDC?
(12 corporations responding)

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too early to say</td>
<td>0%</td>
</tr>
<tr>
<td>Only when a complete, NDC-only solution is ready</td>
<td>13%</td>
</tr>
<tr>
<td>As soon as it makes sense, progressively through pilot e.g. specific region, selected carrier(s)</td>
<td>87%</td>
</tr>
</tbody>
</table>
New areas of focus for key KPIs: Travelers and Data

How are corporations likely to measure the success of their NDC implementation? Which KPIs are they going to use to assess the promise of NDC?

Business objectives shift over time, and NDC is such a long-term endeavor that the KPIs chosen need to remain relevant over the years. Therefore, while cost remains an essential consideration, corporations are looking to NDC solutions to bring changes for the travelers themselves, specifically by:

1. Improving their satisfaction (+17 percentage points)
2. Shifting to a traveler-focused culture (+15 percentage points)
3. Enhancing travelers’ productivity (+8 percentage points)

“Friction is in the middle. There are significant benefits in managing a global program but agility becomes increasingly important. It is clear from recent developments by some suppliers in the NDC space, that there are growing disadvantages of a traditional global program when it comes to speed to market and flexibility.”

JULIA FIDLER. GLOBAL EMPLOYEE EXPERIENCE. MSTRAVEL. MICROSOFT.

“Today, we measure corporate travel on cost-efficiencies and transactions. I would like to see NDC help us become more HR-oriented and a bit less financially-driven. I would like to ensure that our travelers enjoy travel because it is a basic extension of their work in a more stressful environment.”

JENS LILTORP. GLOBAL CATEGORY MANAGER, TRAVEL AND M&E. LEO PHARMA.
Traveler satisfaction and productivity are clearly key KPIs. But, given that many travel departments report to a financial/procurement organization, is it possible to prioritize softer satisfaction-driven KPIs vs hard-savings KPIs to their CPO or CFO?

There are two elements to this response. The first is that cost, cost-savings, and cost-avoidance will always remain key decision-making factors. The second is simply that measuring traveler satisfaction implicitly means measuring other, secondary, cost-driven KPIs related to the total cost of travel – both direct and indirect - such as:

- **Leakage**: pleased with their experience, travelers will not be tempted to compare with fares outside of their corporate tools or buy ancillaries at the airport. This will generate direct and indirect savings, e.g. out-of-policy expenses processes.

- **Adoption**: satisfied travelers will be less inclined to rely on offline support services; rather, they will use corporate tools to their fullest potential in terms of booking bundles and servicing related to voluntary or involuntary changes (decreasing the amount of touch fees and booking time).

- **Personalization**: targeted offers will also increase adoption and optimize the price of flights based on past behaviors and preferences e.g. by only proposing expensive flexible offers to employees with a high rebooking pattern.

- **Productivity**: in line with more granular corporate policies, employees will enjoy having more productive journeys e.g. by selecting bundles including WIFI access.

- **Retention**: employees are likely to be attracted by modern and thoughtful corporate travel experiences as part of the HR-driven overall mobility mission and employee NPS (Net Promoter Score) initiatives.

![How important are these business objectives?](chart)

(12 corporations responding)
Finally, access to more data could be a critical factor for implementation of NDC solutions. Indeed, not only have we seen a very impressive 17 percentage point jump in the importance of data for corporations in just one year, but 100% of travel manager respondents expect to see their role evolve with the availability of more data. Data insights - and eventually adoption of A.I. - will optimize and transform many travel dimensions, ranging from personalized traveler experiences, more intelligent forecasting and secured returns on investments, to data-driven agile programs to continuously improve the value proposition for all stakeholders.

How Can Corporate Suppliers Adapt to This Demand?

At first glance, it seems in corporate suppliers' best interest to adopt NDC solutions as soon as they possibly can: airlines are engaging their partners to help them reach 20-2020 and most of their corporate clients intend to make NDC capabilities an upcoming condition in their RFPs.

Nevertheless, a significant number of corporate suppliers are not keen to quickly move into the unknown without first figuring out how to maintain and/or increase their profitability, largely driven today by legacy distribution incentives.

Additionally, some suppliers, e.g. some TMCs and OBTs, are not eager to move to NDC, and justify this reluctance with a number of reasons:

- “The return on investment is not as good as other projects”
- “I cannot afford to lose my incentives”
- “We may need several terminals or switch displays, which will slow things down”
- “NDC is simply not mature yet e.g. servicing, interlining”
- “Not all airlines are connected to NDC yet”
- “The integration with mid and back office remains an issue”
- “GDSs understand the TMCs, airlines do not”

However, only a very small fraction of corporate suppliers – 13%– are still unsure of how they will work it out in terms of economics. Instead, most players (67%) expect NDC to improve their business results – despite the perceived risks and subject to certain conditions.

With NDC reaching maturity, would you expect NDC to improve your business results?
(15 corporate suppliers - TMCs & OBTs - responding)

- 14%: Yes, it is already the case
- 27%: Yes, but I need to keep my investments under control
- 13%: Yes, but I would have to pass some additional cost to my customers
- 13%: Yes, provided I get some fair compensations from some airlines
- 13%: No, I don’t know how this is going to work in terms of economics
- 13%: It is too early to say
These conditions are the true key to unlocking corporate suppliers’ support, as they reveal the underlying concerns. Diving into these conditions, we can see that these can be grouped into two types: downstream and upstream.

- **Downstream condition:** These corporate suppliers stated that they would have to pass on additional costs to their customers. Charging more downstream is risky of course, as it could cause serious customer retention issues. Unless, that is, the additional value that NDC creates can be demonstrated, e.g. by offering additional services with data-driven insights to their customers or by helping them with selective rich content management.

- **Upstream condition:** This group stated that they would need to receive additional revenues not from their clients, but from upstream: the airlines themselves. This again is not likely unless corporate suppliers are able to prove that they increase not only total airline revenues, but also the yield per passenger. NDC rich content should enable corporate suppliers to boost revenue per passenger through branded fares and higher attachment rates of ancillaries.

What remains interesting in this analysis is the overall optimism shown in the results. If anything, it is quite useful to delve deeper and try to understand exactly which P&L drivers – cost opportunities, revenue opportunities, and business sustainability – are specifically driving this outlook.

**Costs savings opportunities**

As shown below, apart from direct incentives, over 50% of corporate suppliers believe that NDC will have a “strong” or “very strong” impact on cost savings when it comes to reducing the booking time for both agents and employees.

While in the transition period that is bound to happen, agents may have to deal with several displays. However, the top expectation is that NDC will reduce time when booking bundles upfront (personalized or not), rather than forcing clients to buy ancillaries later on.

Half of the suppliers also believe that NDC solutions can reduce their costs or the cost to their clients with typical KPIs such as:

1. Automation e.g. Bots and self-service for simple bookings and tasks
2. Reduce leakage and process inefficiencies (reconciling expenses occurring outside of policies)
3. Increase OBT adoption resulting in reduced offline support

Could you qualify the expected cost-saving impact of the adoption of NDC for your business in each of the following areas?

(15 corporate suppliers - TMCs & OBTs - responding)

![Cost-saving impact chart]

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New revenue opportunities

The most significant revenue opportunity expected by 87% of respondents stems from retaining existing customers and winning new ones with a competitive and differentiated NDC-based offer.

This shows that the return on investment can be measured not only on organically growing the portfolio of corporate customers but also through controlling pricing erosion.

“For the most part, TMCs deliver transactions. In the future, I expect them to deliver more value-add, data-driven consultative services with insights, which I can then bring to my management with actionable recommendations”

ANN DERY. GLP. DIRECTOR, GLOBAL TRAVEL. S&P GLOBAL

Once implemented, how significant of a revenue opportunity do you expect NDC to be in the following cases?

(15 corporate suppliers - TMCs & OBTs - responding)

- Retain and win more customers with differentiated, rich content offerings
- Sell new data-driven solutions and services e.g. real-time data or A.I.
- Increase compensation from airlines by (up)selling more e.g. ancillaries
- Grow booking volume by addressing leakage
- Other (please specify)

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Above the 50% mark, with either a “very significant” or “significant” revenue impact, we also find:

1. Gaining an upside in selling new data solutions. While very promising because corporations are eager to get more data and gain insights, this might ultimately be tempered by who will be able to monetize the data.

2. Getting recognition and compensation from airlines for promoting and selling their rich content, shifting away from some simple schemes based solely on volume and average ticket prices.
Business sustainability and upside

Over 70% of corporate travel solution providers agree that some NDC-related solutions will create opportunities that will be important to future success.

Specifically, these providers expect to:

1. Streamline pre/post booking processes with upfront personalized offers (which half of suppliers deem “very important”). With NDC-based offers, this efficiency gain (increasing adoption, reducing time, and avoiding leakage) combined with a sticky personalization (in line with more granular corporate policies) will potentially be an important strategic driver.

2. Change the nature and reactivity of the service overtime through retailing capabilities offering agility through NDC-based dynamic pricing.

3. Drive Innovation. The vast majority of potential NDC-related innovations have probably not even been thought up yet. As a basic example, a calendar input could automatically check whether a trip has to be made and proactively propose a compliant option to the traveler based on past behavior and other invitees.

Although NDC may represent some risks, the dual pressure from suppliers (airlines) and clients (corporate travelers) to adopt NDC, combined with the opportunity to reduce costs and boost additional revenue is driving NDC adoption. But there is clearly a lack of speed and some friction in this transformation with one major question mark: the business models themselves.

How important are the following approaches to help make your business strategy more sustainable over time?

(15 corporate suppliers - TMCs & OBTs - responding)
Business Model Drivers – The Road to Collaborative Retailing

What are the drivers guiding the players towards these new business models? What are the pressure points, the incentives, the needs and demands that are forcing this change – and where is this leading to the industry?

This study was able to identify two main categories of business drivers: Collaboration business drivers based on transparency, alignment and communication and Retailing business drivers based on flexibility/agility, customer centricity, and value.

Collaboration Business Driver: Transparency

Looking at the commercial model alignment below between corporations and their supplier, the starkest contrast is a 53 percentage point gap on transparency. This opacity in the commercial model is critical to address partly due to the perceived complexity of revenue flows throughout the value chain and the real value that each partner brings.

“Time has come to get out of the woods. With NDC, we need to better understand the added value of each player within the value chain to ensure a transparent strategic alignment.”

MARC ZUBER, GLOBAL TRAVEL CATEGORY HEAD OF NESTRADE SA (NESTLÉ GROUP)
How important are the following criteria to improve the commercial model?
(Both "very important" and "important" responses shown)
(12 corporations and 15 corporate suppliers - TMCs & OBTs - responding)

- More transparent (with no opacity in revenue flows)
- Simpler (by reducing the number and type of fee items)
- More cost-effective e.g. online efficiencies, no surcharges
- More performance-driven, based on corporations KPIs
- More predictable by removing uncertainties on unexpected fees
- More value-based e.g. on skills and data vs. simple trx

This transparency issue could have strategic implications. Some corporations would like to better understand the revenue flows, the incentives or other financial motivational schemes.
Collaboration Business Driver: Alignment

In collaborative retailing, the key to success is having all partners aligned on common objectives (business & capabilities). By doing so, friction is removed and business focus is centered and increased.

Unfortunately, this is difficult to accomplish in corporate travel due to the large number of partners involved. Instead of a typical B2B play, given the presence of TMCs, OBTs, GDSs, airlines, and corporations, it may be a complex B2B2B2B2B2E³ model.

The following alignment chart highlights some very individual agenda items for specific players of the value chain: 60% of airlines want to cut distribution costs while 33% of corporate suppliers want to keep GDS incentives. This represents an opportunity for both parties to reach some level of alignment on their business model reflecting their joint retailing interests.

"Extremely important" or "Very important" NDC-related business drivers
(15 corporate suppliers - TMCs & OBTs - responding)

3 "E" for Employee.
4 In this chart GDS questions have only been presented to each relevant audience e.g. incentives to TMCs/OBTs.
Further highlighting this point, NDC is expected to facilitate a simpler and more focused business relationship model, based on a vertical retailing value chain among three main actors: Airlines, corporate suppliers, and corporations. As shown in the graph below, 100% of corporations and 93% of TMCs/OBTs want to reinforce their business relationship with airlines. Only 47% of TMCs/OBTs would expect to have a tighter relationship with GDSs or aggregators.

With which players would you expect NDC to reinforce your business relationship?
(15 corporate suppliers - TMCs & OBTs - and 12 corporations responding)
Collaboration Business Driver: Communication on Content

After transparency and alignment comes the need for regular communication.

In terms of functional alignment, corporations and their corporate suppliers see rich content as having the most impact on their business. Airlines, mostly focused on offering packages of services at different price points, are behind this expectation by over 30 percentage point. While airlines see bundles as a delivery vehicle for more content, corporations do not seem to similarly prioritize such packages. Instead, they want to ensure that they receive offers that prevent leakage.

While most airlines and corporate suppliers in this survey state that the impact will be new NDC price points and dynamic offers, this message does not seem to have made it to corporations. This looks more like miscommunication than misalignment, as these new price points should present strong cost-saving benefits for corporations. Business-driven use-cases beyond Wi-Fi access and personalized bundles will also strengthen a common focus among all players.

Communication is critical because distribution partners expect to receive more information from upstream players, not only on the full spectrum of rich content and support but also on strategy and potential innovative opportunities.
What are your top 2 priorities for NDC-related capabilities that you expect will create the most impact for corporate travel?
(12 corporations, 15 corporate suppliers and 15 airlines responding)

Retailing Business Driver: Flexibility and Agility

The fact that 92% of corporations in the survey want to start NDC “as soon as it makes sense”, and two-thirds of corporates are prioritizing “Flexibility with hybrid display”, appears to be at odds with corporate suppliers (who would be delivering this) ranking it 27 percentage point below.

Given that there will be a transition period as players move to NDC, the majority of corporate suppliers will probably consider a hybrid model where each connection type e.g. aggregator, GDS, API, is evaluated against a set of business criteria. These criteria will likely include not only typical cost-and-scale requirements, but also important retailing factors such as ease of use, revenue potential, dynamic content access, flexibility, speed, and agility.

Such hybrid models could increase the range of options and stimulate the market.

“We have been working in a very static environment for years. Many software companies do two-week sprints to improve the user experience. I would expect similar incremental and innovative travel enhancements for our employees to intuitively use and appreciate.”

ANN DERY, GLP. DIRECTOR, GLOBAL TRAVEL. S&P GLOBAL
Retailing Business Driver: Customer Centricity

Customer centricity looks like a challenging mission, given the unique and varying imperatives, strategies and operational requirements of the players involved. The survey revealed that corporations, airlines and corporate suppliers all identified the same business change and improvement as their top priority: increasing traveler satisfaction.

“Our philosophy has been to focus on the experience, usability and content. With NDC getting steam, we were already fully aligned. NDC helps us foster our significant international growth and improve our customers’ return on investment with a business model based on simplicity, flexibility, and value.”

SCOTT WARD. GLOBAL HEAD OF PARTNERSHIPS. CORPORATE TRAVEL MANAGEMENT.

 Boosting customer satisfaction is the factor on which alignment between all players is so strong - between 73% and 92%.

This reveals the key pillar to building a successful retailing model: focus first and foremost on travelers and their experiences.
Retailing Business Driver: Value

A true collaborative retailing business model is based not on platform usage, specific channel access, or legacy revenue flows, but rather on value and performance. Everybody wins: airlines sell more, corporate suppliers enhance their results, and corporations benefit from more advanced solutions to address their business KPIs.

As the above chart makes clear, corporations are voicing the need to create value with data and A.I. at over 75% - which is not only remarkably high, but also surprising given the big gap of over 35pp they have with the corporate suppliers supposed to deliver this. This also echoes the interest towards data and AI-driven innovation for corporate travel.

“What makes us so enthusiastic about NDC is to dynamically provide the very best content to our corporate customers. Moving away from unsustainable business models, we have built an innovative, cloud-based, cost-effective NDC platform to deliver this rich content and offer differentiated, data-driven premium services.”

ROBIN SMITH. CHIEF PRODUCT ENGINEER. CLICKTRAVEL
“Leisure” appears to be far more open to experimenting with advanced retailing techniques than corporate. This is partly due to the competitive and agile environment its actors operate in, with multiple online players ranging from airlines to any of their indirect partners e.g. Online Travel Agencies (OTA) and Metasearch (MSE). Because of its market dynamics, leisure has already seen some significant disruption in terms of business model.

A key driver in this model is the ancillary opportunity – something that has become critical to airlines’ profitability.

Just how big is this opportunity? Well, airlines’ ancillary revenue was estimated to be $82.2 billion worldwide in 2017 (10.6% of global airlines revenue), and if that number somehow doesn’t seem big enough, it pays to look at it per passenger. For some low-cost providers, ancillaries generated up to $50 per passenger in ancillary products – a number they expect to increase in the future.

It is therefore no surprise that airlines are looking at NDC retailing capabilities. Three-fourths of all airlines in this survey stated that the increase of current and future ancillaries will be very important, and will be facilitated by NDC rich content.

With NDC rich content, how important would the increase of current and future ancillaries sold by ticket be for leisure travel?

(15 IATA NDC Leaderboard Airlines responding)

- Important 27%
- Very important 73%
- Not so important 0%
- Not important 0%

NDC can dynamically generate new attractive price points on the “cheap” side while simultaneously offering a new range of ancillaries on the “up” side, attracting price hunters and then enabling them to choose relevant options for their journey. Moreover, NDC would also unlock the possibility of testing new ancillaries instantly.

**Back to Consumers’ Experiences**

But can we reconcile this quest for ancillary revenues with an engaging customer experience? With too much emphasis on additional revenue, will this impact customers’ loyalty?

In leisure, most consumers look for the best prices, promotions, and special offers. But, if not well managed, this “low price” mindset may create bad experiences. For instance, consumers may have had unpleasant surprises when – well engaged in their booking process – they realize - only at the end - that they have to pay unexpected amounts, such as payment-related fees. Or worse, when a misleading special offer ends up not being available anymore.

The intent is for NDC to enable a more robust and value-focused experience for travelers.

**Metasearch 2.0 – powered by NDC**

Years ago, the introduction of metasearch engines disrupted the established business model, changing it profoundly. Key players such as Kayak, Google Flight, and Skyscanner proposed a much larger choice by displaying more content e.g. both Full Service and Low-Cost Carriers.

Their model bet on customer traffic and value. On one hand, they invested big on IT and marketing. On the other, they recognized a streamlined revenue flow.

Then NDC came along to help MSE further disrupt the business model. NDC can help metasearch with increased differentiation across several dimensions: Mobile, Ancillaries, and Speed.

“Working closely with a fast-growing number of airlines including British Airways, Cathay Pacific, Singapore Airlines and Finnair we see that connecting directly through the NDC API provides business benefits for everyone: Travelers enjoy a seamless experience on mobile, airlines get a higher yield per ticket with rich content, and finally, our businesses become more agile, scalable, and profitable.”

**HUGH AITKEN. SENIOR DIRECTOR, GLOBAL STRATEGIC PARTNERSHIPS SKYSCANNER**

One of the main challenges of metasearch companies has always been to deliver a seamless experience for users while demonstrating value to airlines. This is particularly challenging during the landing phase, which can generate delays (due to price validation), potential price discrepancies, or simply an experience discontinuity.

Mobile has made this challenge even more difficult. The extra time and complexity needed for a graceful landing – from a mobile app to a responsive airline site – is sometimes simply not compatible with new mobile behaviors.

This is why metasearchers have increasingly proposed direct/facilitated booking processes: “book with metasearch”, to make this experience feel seamless and within the airline brand. Not only do conversion rates improve, but so does the average selection of ancillaries.

Further demonstrating the above point, The Skyscanner Guide to NDC mentions a 100% uplift in ancillary revenue and describes how airlines could connect through NDC in only a month.
Online Travel Agencies – Selective NDC Play

Some OTAs have questions about NDC. They challenge the rate of return of NDC vs. other projects. Will an upsell really take off? For those big agencies that still make a majority of their revenue other than through airline tickets, is it really worth the risk of “distracting” visitors with new airline offers, instead of focusing them on other, proven and more profitable content? Given the limited real-estate on mobile, this concern is likely to increase in importance over time.

However, OTAs may realize that they would have to adapt not only because of NDC, but also other industry drivers, such as managing data for advanced personalization, and leveraging A.I. to optimize their processes and enhance their business.

Moving forward, NDC will selectively enable new business models and content sourcing strategy for relevant OTAs – specifically, those OTAs focused on providing rich air content and personalized experiences to their users, while optimizing their business with a retailing, data-driven approach.

NDC-Powered New Players

The often-forgotten part of NDC is that not only it may be a game-changer for some current actors, but it could also enable the next generation of market players. Just like the internet allowed GAFA (Google, Apple, Facebook, and Amazon) and BAT (Baidu, Alibaba, Tencent) to impact the travel arena with new business models, could NDC enable new entrants to enter the ring?

“Our strong investments to better serve our customers and our airlines partners have resulted in an estimated yield performance per ticket of 40 Euros above peers. We are now investing in NDC to secure our strategic positioning and growth, enhance our business agility, and reinforce our retailing value for airlines.”

JOHN MANGELAARS, CEO, TRAVIX.

* The Skyscanner guide to NDC. Enable the future of airline retailing to benefit from upsells in 30 days
Already, new platforms combining instant messaging, social, and payment (e.g. Facebook’s Messenger and WhatsApp, and Tencent’s WeChat) are increasingly becoming the channel of choice for conversational commerce offering guidance on all type of requests before, during and after trips. This is especially interesting given that these channels’ combined users come in at over 3 billion.

Far from the classical “search” with city pairs and dates, conversational commerce is perfect for capturing new ancillary opportunities. By monitoring geo-localized information along with emotional receptiveness at the airport, there is an opportunity to trigger relevant notifications that tap into impulse buy behaviors e.g. seat upgrade or lounge access offers after the airport security check and with enough time to relax.

Seeing this opportunity, some airlines are increasingly looking at conversational commerce, as another example of a new distribution channel enabled by NDC.

And Beyond:

It also pays to look further down the road. Internet giants are investing huge amounts of money into digital assistants (e.g. Amazon’s Alexa, Google Home or Xiaomi’s Xiao Ai). These are not typical distribution channels, but devices sitting in the most intimate place: either in consumers’ homes or on their wrists. They are continuously collecting sensitive candid queries, consumer preferences and building an artificial intelligence rapport. With NDC, it makes sense for these digital assistants to eventually complement IM as the ubiquitous and most intimate conversational commerce for further innovative and relevant travel services.

“Exploiting A.I. to assist travelers throughout their journey, the Finnair Facebook Messenger chatbot “Finn” is the most technologically advanced NDC solution in the market. This unified retailing approach with NDC allows us to open up new sales channels while optimizing our investments. Further, it constantly improves the way we serve our customers with holistic and real-time data insights.”

KALLE IMMONEN. HEAD OF DISTRIBUTION & REVENUE PROTECTION AT FINNAIR
The next few years will be exciting, given the potential of NDC-based solutions to help all players enhance air travel.

A sense of urgency now permeates the sector, as new and agile collaborative partners are increasingly deploying NDC solutions and sharing success stories of new business growth opportunities. As of today, 14% of TMCs/OBTs have already managed to improve their business results with NDC solutions, and 53% expect to enhance their business if certain conditions are met. One leisure player is developing new sales channels combining an NDC solution with an A.I.-powered Facebook chatbot.

While there is no single one-size-fits-all business model to use given the diversity of players, there are concrete business principles that can foster growth with NDC solutions. Specifically, two categories of business drivers will be crucial to the final form of business models: Collaboration business drivers based on transparency, alignment and communication and Retailing business drivers based on flexibility, customer centricity, and value.

Furthermore, it is important to remember that NDC is a standard that is still on the journey to adoption through a range of implementations and solutions.

Today, it might be revolutionizing Corporate, OTAs and Metasearch’ business models.

Tomorrow, the innovation enabled by the open distribution models it facilitates might kickstart a new revolution in chatbot-based flight booking-and-servicing. And the day after that, home or office digital assistants might become a channel in their own right, followed by potentially further innovation - be it VR, AR, AI or something we haven’t even dreamt up yet.

The door is wide open.

“I hope we are never there with NDC because this will mean we will stop innovating. Other industries are moving fast and we should learn from them by continuously improving NDC to deliver the best experience to all travelers.”

NEIL GEURIN. DIRECTOR, DISTRIBUTION STRATEGY. AMERICAN AIRLINES
In line with the diversity of players in the value chain, various expectations throughout the value chain for either corporate or leisure, there is no single recommendation to provide, but rather some final guidelines to consider for a business case:

1. **Collaboration:**
   - In a streamlined delivery model, ensure a collaborative alignment and communication approach with all selected core partners in terms of their objectives to deliver continuous value to travelers.
   - Reconsider obsolete, complex, and opaque models and instead adopt transparent retailing best practices, outside of the travel industry.
   - Look at new KPIs beyond the typical cost-and-scale requirements by also monitoring satisfaction, speed, agility, dynamic content access, ease of use, and revenue potential.
   - Leverage real-time data, its future added-value, and associated monetization scheme throughout the collaboration chain.

2. **Business case:**
   - In the light of NDC being increasingly requested in corporate RFPs, consider first the financial retention impact of potentially losing customers as well as fee erosion due to contract renewals in addition to technology and implementation-related investments.
   - In the commercial model, further differentiate cost-driven, transactional-related tasks from value-driven advanced functions, expert consulting, data-driven services.
   - Within corporations, increasingly look at and report on the total cost of travel (both direct and indirect) based on traveler satisfaction and productivity indexes.
   - Identify and demonstrate downstream and upstream value to unlock new revenue opportunities based on retailing performance results.
   - Consider hybrid models, providing ongoing flexibility and choice to compare on Total Cost of Ownership (TCO), speed, revenue, and innovation and be in a position to dynamically adjust distribution mix based on KPI optimization.

3. **Go-to-Market**
   - Identify a demanding pilot in a lead market, along with the right environment and partners to test and deploy newly-adjusted business models.
   - Assess the benefits of regional pilots when looking at agility and time-to-market.
   - Define key retailing KPIs to assess and monitor the implementation and deployment of NDC-based solutions.
   - Anticipate and enable a business model change with new business processes, dedicated programs, executive sponsorship, and necessary skillsets to optimize it.
   - Consider an innovative framework including open APIs and new agile partners to ensure the necessary ongoing evolution and differentiation of NDC-based solutions.
APPENDIX: METHODOLOGY

This white paper is based on interviews and surveys performed between June and September 2018. A total of 42 companies completed online questionnaires, designed to help better understand some dynamics and trends, particularly in the corporate market.

Answair would like to thank all participants who provided inputs during these surveys and interviews, the latter of which generally lasted for an average of 40 minutes. The surveys were conducted with:

- **12 Global corporations**, ranging in size from small/medium to very large companies. These companies represent a consolidated total travel spend of over $3 Billion USD per year. Ten interviews were conducted with the heads of travel or travel managers of these corporations.

- **15 Corporate suppliers** consisting of Travel Management Companies (TMCs) and Online Booking Tools (OBTs). Out of the fifteen, five of them are IATA NDC Level 3 certified. The fifteen companies that were interviewed in this white paper and that gave permission to be named are:
  
  AmTrav, ATPI, Capita Travel and Events, Carlson Wagonlit Travel, Clarity, ClickTravel, Corporate Travel Management, INNfinity, Lufthansa City Center International GmbH, Serko, Travel Planet, and WTMC. The majority of participants – 46% - hold “C-level” positions. 39% consisted of Directors or Managing Directors and 15% of Heads of Commercial.

- **15 Individual airlines**, all part of the IATA NDC Leaderboard, which currently consists of 21 airlines. These airlines, representing over 700 million Passengers Boarded (PBs) vary in size and range from approximately 10 million passengers per year to over 100 million passengers. The carriers are geographically diverse with operations in North America, Europe and Asia. The majority of participants hold Senior Director or Director roles (40%), 27% are Vice Presidents, 20% are Head of Distribution, and 13% are NDC Managers.

Additionally, a number of travel companies were also interviewed including online leisure players.
Disclaimer:

Answair has taken reasonable care to ensure that the information contained herein is precise and relevant to the best of its knowledge. This white paper includes market information and trends, based on research, surveys, and interviews but it is not intended to be a source of investment advice. Due to a survey sample, which is not statistically representative of the full and global community of relevant players, there can be no assurance on the completeness of statistical relevance and representation, nor on the full accuracy of such included information or forward-looking statements.