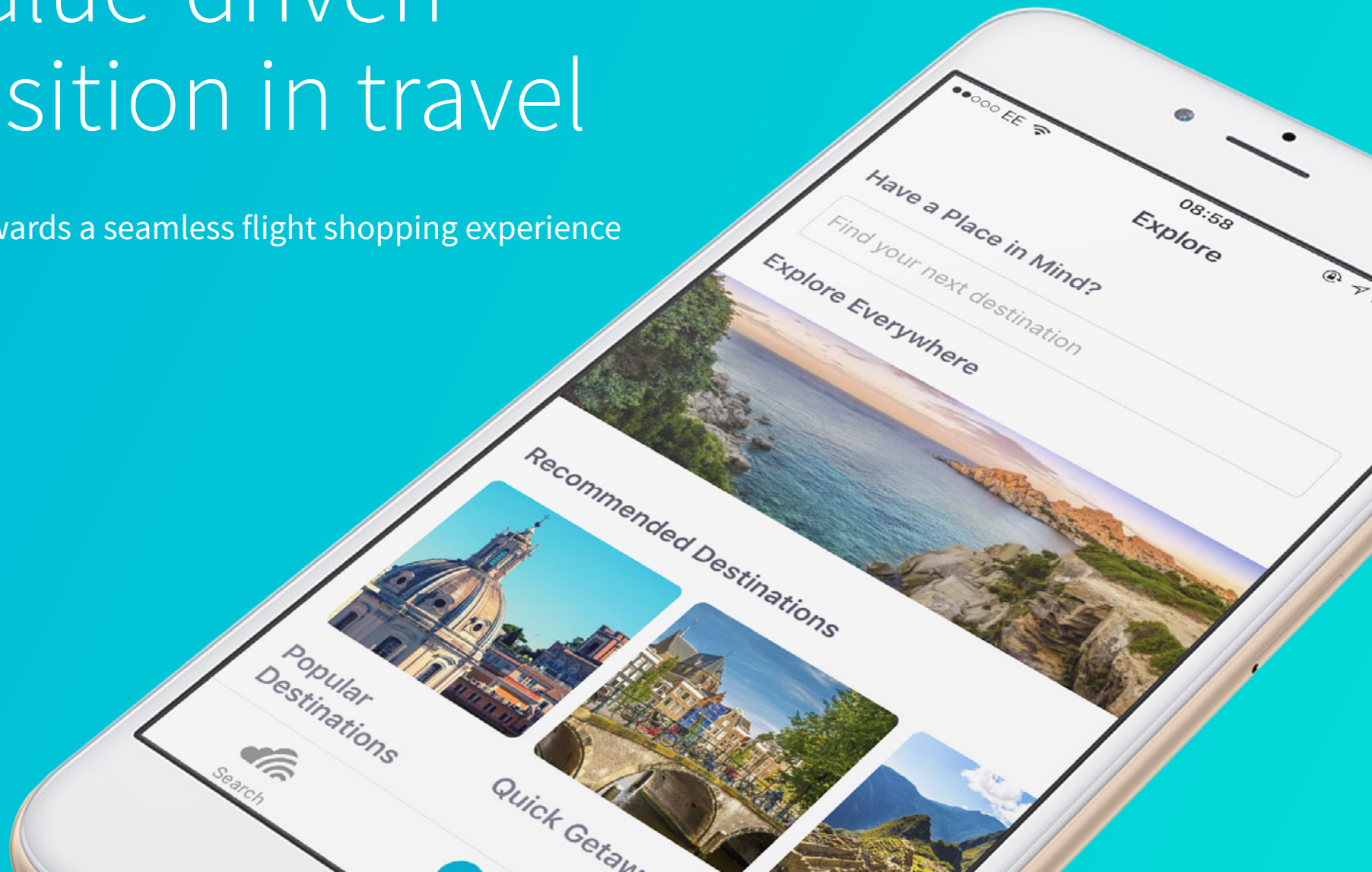




# The value-driven proposition in travel

The evolution towards a seamless flight shopping experience



**Consumer shopping habits have evolved. From yesterday's bricks and mortar purchases, to today's online and mobile transactions. While travel companies focus on desktop and mobile solutions, consumers are transitioning towards apps using voice and bot technology.**

*Travel companies must align with this evolution, thinking beyond traditional distribution, towards more intuitive and value-driven systems. Framing offers, options, and deals in a way that is easy to understand; delivering relevant results based on consumers' needs; and streamlining the booking process. This will improve the user experience and help reduce basket abandonment, overcoming the obstacles to impulse purchases such as endless results pages and cumbersome purchase process.*

*Travel companies also need to be omnipresent, on-hand to book trips wherever and whenever users are inspired. Testing new technologies as they are adopted, but first of all, mastering mobile.*

*The future of retail in travel is not about limiting choice. Rather it is about making choices easier through effective merchandising, and understanding that consumers want practical solutions, not infinite results. This means that the search needs to be intelligent, and go beyond price, towards value. The booking also needs to be fast and easy, with secure payments.*

*In this white paper, we build on our **'Vision for the future of distribution'**, and share thoughts from CEO and co-founder Gareth Williams, VP of Product Filip Filipov, and Principal Engineer Richard Macdonald Keen around how we intend to deliver the user experience and retail solutions that will be the building blocks of the travel companies of the future.*



A man wearing a straw hat, glasses, a dark sweater, and a yellow backpack stands on a train platform. He is looking down at a smartphone in his hands. The platform has tracks and a red safety barrier in the background. The image has a blue tint.

Overcoming the paradox  
of choice

Today's search and purchase processes provide users with an endless list of possibilities. Consumers have more choice than ever-before, yet the online experience continues to generate pages and pages of results for users to leaf through before making a purchase. Presenting the options this way results in users feeling overwhelmed, with time consuming searches increasing the chance of no sale being made.

Booking a trip should not begin with such a digital odyssey. Travellers should quickly find the package which most closely fits their travel plans. Or, if their plans are not definite, a package which inspires them to book.

However, to achieve this state of effective merchandising, a transition must be made from price to value comparison, and beneficial for both users and companies. Behaviour on Skyscanner reveals a tendency for consumers to filter and purchase based on their preferences, showing that fares are only one factor in their booking decision.

Unfortunately, we have not yet reached this state of effective merchandising and progress has been slow for many reasons:

1. Legacy systems can't integrate attributes other than price. Until that's fixed, rankings and competition can't be driven by value (product, schedule convenience, and fare).
2. Travel is a low frequency purchase, so it is challenging to obtain enough data to deliver intelligent results.
3. Airlines are used to having a transactional relationship with travellers, without log in and saved payment options. This further reduces data quantities and accuracy, as actions are tied to sessions not individuals.

“ By delivering the right information at the right time, we can deliver greater value to our users and our partners. The data has shown that users are willing to pay more to get more – even for something as simple as a better booking experience.

*Faical Allou | Senior Commercial Manager*

Travel companies face two key challenges: how to deliver personalised and highly relevant recommendations; how to deliver personalized, relevant options with a branded, and mobile-friendly store-front.



A close-up photograph of a person's hand holding a smartphone over an open passport. The smartphone screen displays a QR code and some text, including 'CDC' and 'N/A'. The passport is open, showing the 'PASSPORT' and 'PASSEPORT' covers. The background is blurred, showing a wooden surface and some other objects. The overall image has a dark, moody tone with a semi-transparent dark overlay.

Flexibility and control  
in a mobile world

Travel is primarily driven by a user's desire to reach a destination. And no transportation method offers the reach and timeliness of air travel. Further, the fact that flights are usually the first part of the search process means that airlines and travel agents are at the top of the travel funnel with potential to influence the rest of the booking flow. Accommodation, ground transport, activities etc. can all be 'add-ons' to the flight, which airlines and travel agents can capitalize on through more efficient ancillary retailing.

However, today's user experiences and retailing solutions are still adapting to the multi-device, multi-platform world, after decades of operating around fixed assets: ticket desks, bricks and mortar travel agents, reservations systems residing in large servers and the consumer's desktop. Even as airlines and travel agents adapted to an increasingly online consumer base, the methods to reach that base were still inflexible and binary.

To optimise the travel search and booking experience for consumers, we invite you to look beyond the travel sector to learn how digital search and retail are evolving across the internet economy.

“ Online distribution used to be a case of it's either on your website and it's first party or it's third party. Mobile has changed the picture. Not only do you have apps and much smaller screen space, but you're also now getting voice technologies: Google Home, Alexa and others, first party, third party. So really there is a blurred line and a gradation of degree of first party and third party.

*Gareth Williams | co-founder and CEO*

# Netflix in travel: value based recommendations



Whilst travel companies aren't able to master relevant recommendations, the Netflix experience demonstrates the opportunity to provide these based on an individual's past trips and searches.

Filip Filipov, VP Product Management at Skyscanner, has considered the potential application of the Netflix engine across user experiences in travel:

“ At their heart, both [Netflix and travel companies] face similar challenges of a broad and varied catalogue of options which needs to be presented in a manageable way. People want to spend more time watching their favourite films or programmes, and discovering new ones which meet their preferences and tastes, rather than wasting time trying to find them to begin with. Likewise, people want to enjoy their travel experience, and spend less time on the bookings process.

When certain travel parameters are known, personalising the search is easier, but what happens when a traveller doesn't know their destination and has no cost or time constraints? Netflix manages inspiration with data accumulated from previous viewing and makes recommendations based on similar entertainment, either by genre or actor/director or crowd (people who enjoy a certain type of content also enjoy XYZ content). But adapting unstructured travel plans to this model is not straight forward.

“ Making recommendations in travel is more challenging than in verticals such as entertainment and say, groceries, where behaviors are replicable. Travel is vast and the cues are more complex – the fact that you went to Dubai five times might mean you want to go again, or exactly the opposite. On the other hand, if you search for two adults and an infant, that should rule out suggestions such as a party weekend in Ibiza. There's a lot of work to do in this area, and the Netflix problem in travel won't be solved easily.

Despite the challenges, at Skyscanner we are keen to start tackling recommendation and personalisation. We have a handful of teams working towards a solution that will remove the endless list of options commonly associated with metasearch and help travellers fast-track to their ideal itinerary. Ultimately, the goal is ensuring that travelers feel they understand their travel options and receive what represents the best value, every time.

To deliver on this, a solution must:

1. Understand and answer more travel questions based on intent rather than requirements
2. Provide different experiences for different queries
3. Provide different experiences for different travellers
4. Rank content in results based on its relevance to the traveller and their query
5. Make it fast and easy to change the search results across app and web



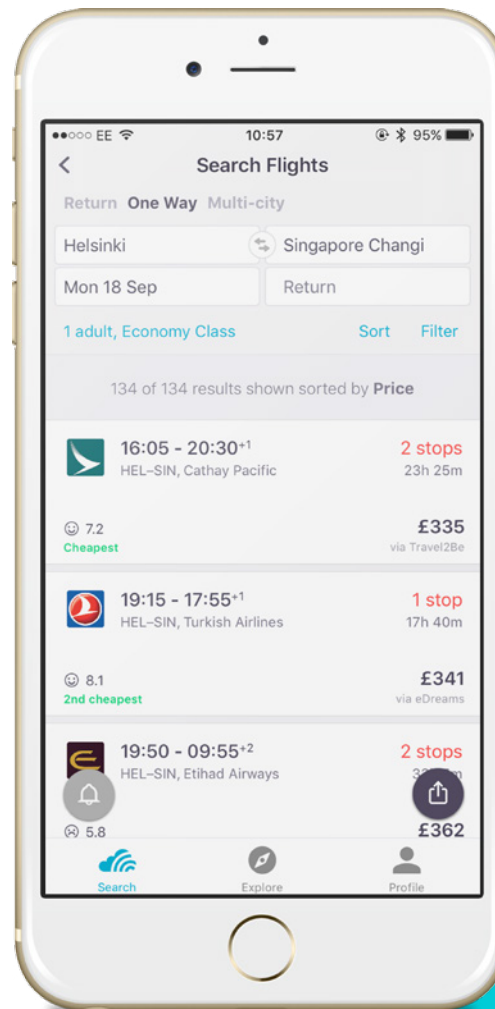
## Steps toward value-driven search

Whilst this is no mean feat, we have already taken steps towards value-driven search. Last year, we became the first global travel search engine to launch a Partner Quality feature that aims to help travellers by displaying a rating for each supplier based entirely on travellers' booking experience feedback from the past 91 days, upweighting the importance of pricing accuracy and transparency in consumers' decision-making process.

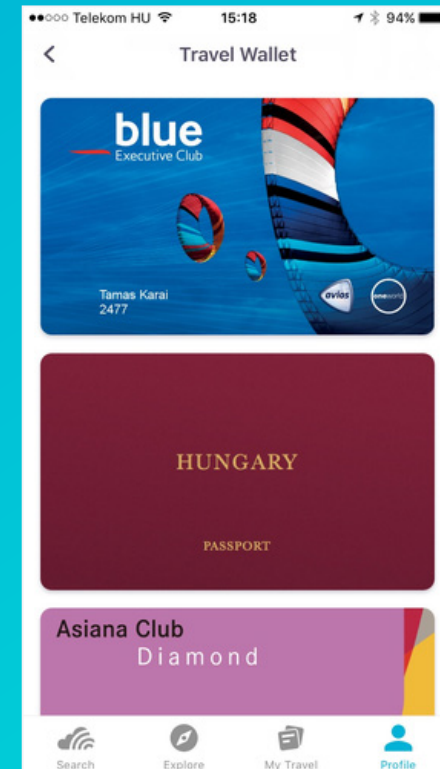
A further recent feature is our Flight Quality Score, which has been developed by in-house Data Scientists using Machine Learning. Flight Quality Score enables Skyscanner users to start filtering and ranking results according to price and quality, allowing them to assess value in a more straightforward way.

In a further step towards a more tailored traveller experience, logged in iOS app users now have access to a Travel Wallet, which is available within the Profile section of the Skyscanner app. The feature is designed to provide a central storage location for travel related documents: specifically passports and loyalty cards at present. Passports are supported for all of our markets, and we handle all frequent flyer programs.

Security is also guaranteed as documents are stored locally on the device, and only accessible to authenticated users after they unlock it with their Touch ID or pass-code.



Skyscanner app day view



Traveller wallet



# The future of travel retail: Direct Booking

BRITISH AIRWAYS

Total  
AUS1,085.15  
[View summary](#)

1 traveller  
Heathrow (London) - Melbourne  
31 Aug 2017 - 21 Sep 2017

Step 1 of 5

Booking with British Airways

- ✓ It's easy and secure
- ✓ British Airways will email you when your customer service needs

Check your itinerary

✈ Outbound LHR - MEL  
Thu, 31 Aug 2017

British Airways | Powered by British Airways | © 2017 BA  
MacBook Air

Evidently, the future of travel retail is about much more than a transaction. It is about surfacing the right (read: relevant) information at the right time to satisfy a user's needs. As well as raising awareness of the products they may not have considered through offers and alerts. This is particularly important on mobile, where there is limited space to display information.

Travel is not alone in its need to evolve. The current practice in e-commerce is delivering solutions in which the branding of the marketplace and its offering overshadows the branding and unique characteristics of suppliers. So, it may surprise you that a key source of inspiration for Skyscanner when looking to improve its travel retailing solution has been an e-commerce brand – **Tmall**.

Tmall is an innovation 'Made in China'. It gives supplier brands the space and ability to control the display of their products – offering 'store-fronts' of sorts, with abundant up-sell opportunities built-in. These store-fronts – often referred to as 'flagship stores' – give suppliers the space to express their branding and deliver their experience within a safe, performant environment users trust and come back to.

Skyscanner is working to deliver such opportunities for its partners through

Virgin Atlantic on the Skyscanner Marketplace

**Direct Booking** – a solution which is all about providing a flexible, optimized retail experience, with features which bring the right options to the top of the search in the increasingly small space of the mobile front page. It is designed to put the retailer's brand at the forefront and ensure a direct connection to the consumer, regardless of the context of purchase.

The image shows a screenshot of the Virgin Atlantic storefront on the Skyscanner Marketplace. The background is a purple-tinted image of a woman sleeping in an airplane cabin. At the top, there's a navigation bar with the Skyscanner logo and links for Flights, Hotels, and Car hire. On the right, there are links for currency (GBP), sign in, and a menu icon. The Virgin Atlantic logo is prominently displayed in the center. Below it, there's a 'Verified Partner' badge with a star rating of 12654 and five stars. To the right of this is a 'Flying Club No.' input field and a 'Submit' button. The main headline reads 'Serving the world's major cities.' Below this, there are four featured travel options, each with a representative image and text: 'Fly to San Francisco from £345' (with a Golden Gate Bridge image), 'Visit New York from £425' (with a Manhattan skyline image), 'Trips for the family from £890 for four flights' (with a family on a beach image), and 'Discover Sydney from £620' (with the Sydney Opera House image).



**FINNAIR**

4 travellers  
London Heathrow – Helsinki Vantaa  
26 Feb 2018 – 2 Mar 2018

Total  
**£421.20**  
[View summary](#)



Step 1 of 4

#### Booking with Finnair

- ✓ It's easy and secure
- ✓ Finnair will email you when your booking is confirmed and handle your customer service needs

**FINNAIR**

#### Check your itinerary

##### ✈ Outbound LHR – HEL

Mon, 26 Feb 2018

Finnair

 18:05 LHR → 23:00 HEL

Direct

##### ✈ Return HEL – LHR

Fri, 2 Mar 2018






Finnair

 08:00 HEL → 09:10 LHR

Direct

#### Your fare

**i** Please check fare details and baggage allowance for more information

<input checked="" type="radio"/> <b>£421.20</b> Light	 x 8 Cabin	<a href="#">Details</a>
<input type="radio"/> £571.20 Value	 x 8 Cabin  x 4 Checked	<a href="#">Details</a>
<input type="radio"/> £2,283.20 Pro	 x 8 Cabin  x 8 Checked	<a href="#">Details</a>

Finnair on Skyscanner Direct Booking

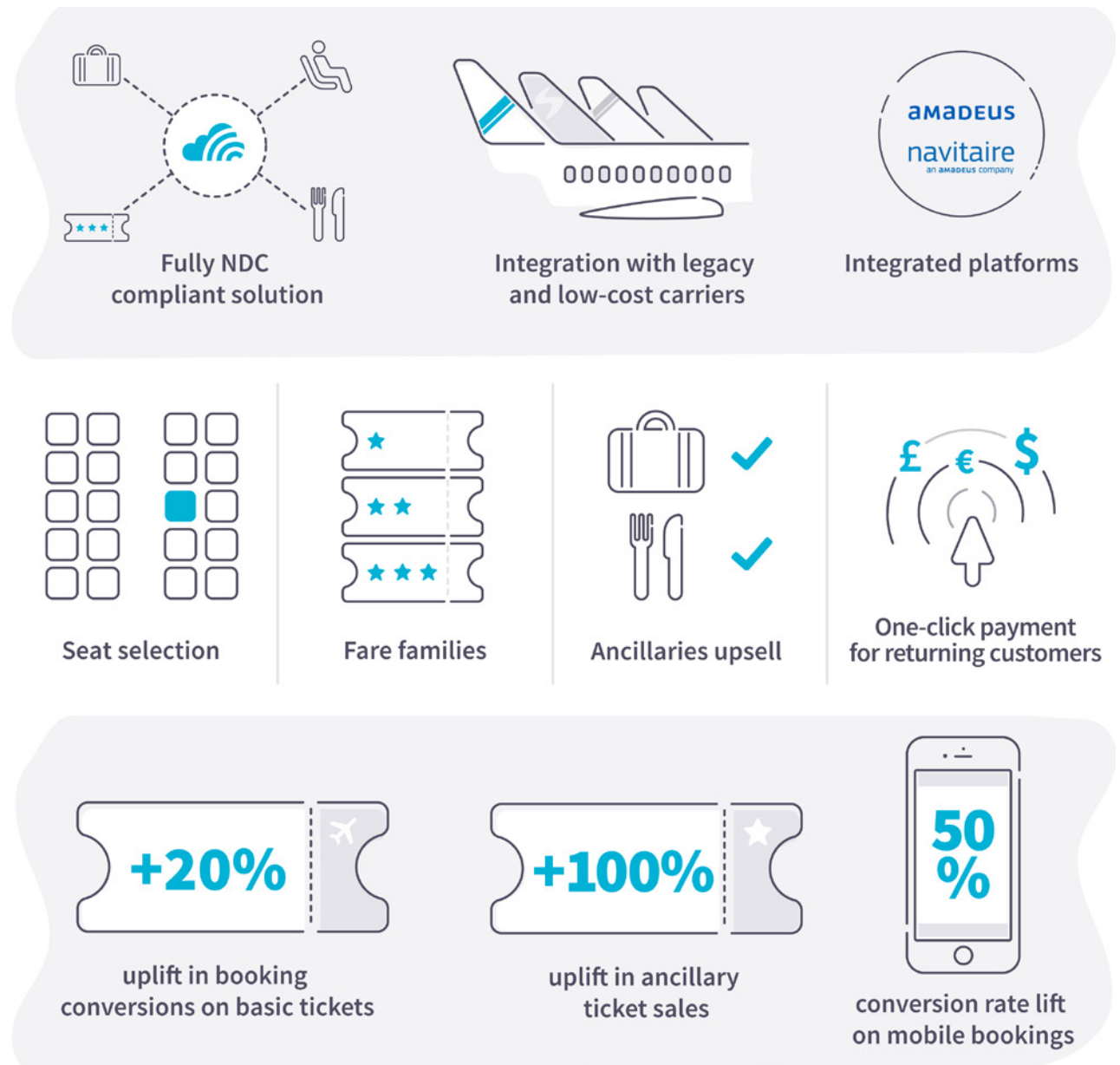
“ Direct Booking, in essence, is putting your booking engine in front of the traveller in locations beyond your own website. It is the evolution of metasearch in a highly cost-efficient, lightweight, frictionless way. Direct Booking allows the sale of ancillaries. It allows the booking to go into your own system, it allows you to follow-up with the customer straight after the booking.

Gareth Williams | co-founder and CEO

Skyscanner Direct Booking has made the travel retail model seamless and easy to assemble, with dedicated branding. And the UX and UI design of Skyscanner Direct Booking naturally facilitates retailing by delivering a platform in which consumers can explore options in manageable chunks, with the goal of delivering on more complex search preferences, and simplifying the decision making and booking process for travelers.

The Direct Booking solution has already proven effective. By giving partners the ability to surface their ancillaries, and engage with users well before the check-in desk we have been able to deliver greater ancillary sales, higher conversion rates, and better yield on those sales. It's all about removing friction so that when travellers have decided to travel they can do so then and there, on whichever device they choose – particularly on mobile and in app which have historically suffered from higher friction and hence lower conversion.

From the several airlines and OTAs that have already gone live with Direct Booking – including **British Airways** and **Finnair** – we have seen excellent results. There has been up to 20% uplift in conversion across the board, and up to 50% increase in conversions on mobile. As for yield, we have seen an up to 100% increase in ancillary sales.



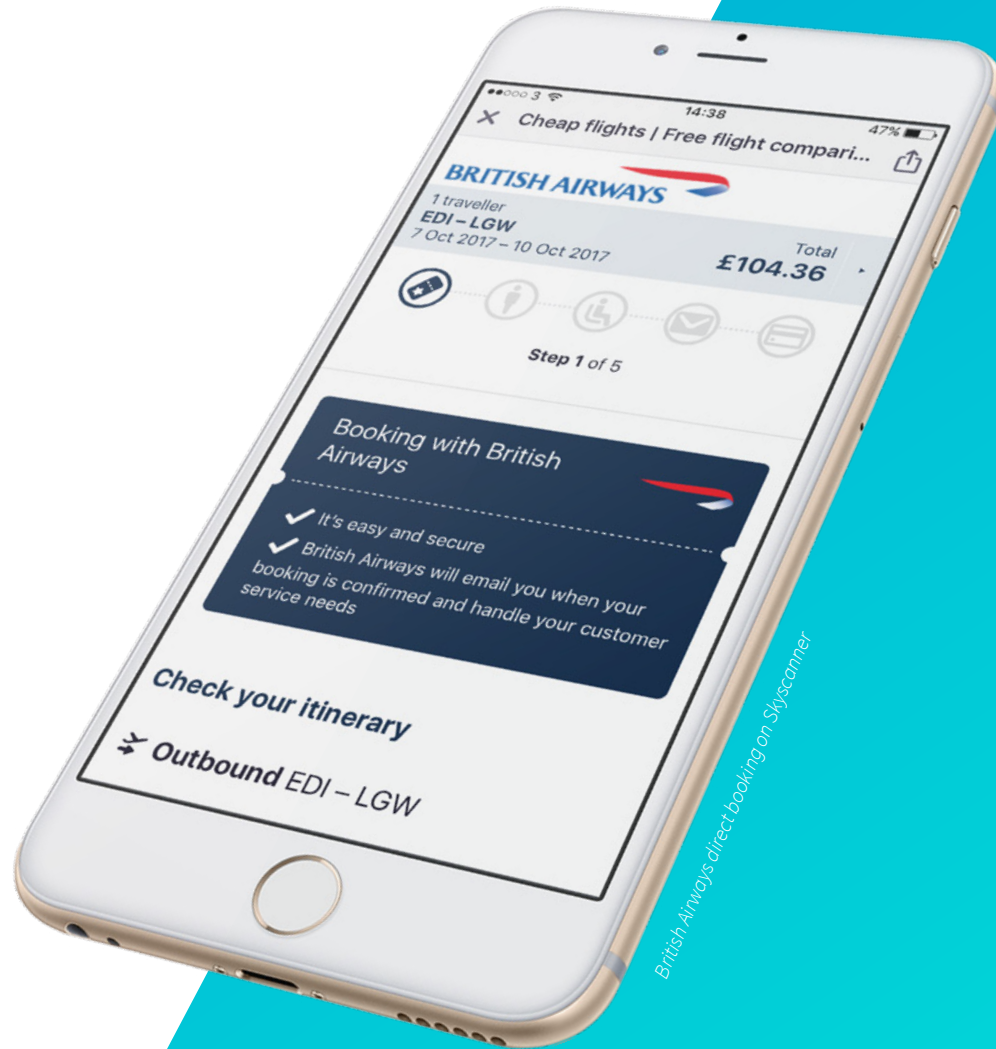
The Direct Booking solution has been enabled by the development of IATA's New Distribution Capability (NDC), which allows airlines to bring more product features to the fore in a variety of contexts, to fine-tune differentiation and optimize search. With ONE Order, airlines can offer a universally accessible container for all elements of a trip.

Skyscanner clearly saw the benefits of these airline initiatives early on.

“ We've worked closely with IATA and pioneered NDC since the beginning. In fact, we were the first Tier 3 accredited partner. And we've implemented this direct with airlines, as well as Navitaire and Amadeus, so we have a range of ways to implement what is actually a business and distribution discussion with our partners.

Gareth Williams | co-founder and CEO

So far, our main Direct Booking achievements have been proving the concept works for airlines and OTAs – with fantastic results – and building a platform which allows every partner that wishes to participate to do so with us. This has significantly improved the exchange of data, which is critical to streamlining the process as mobile retailing evolves.



British Airways direct booking on Skyscanner



A hand holding a blue credit card with a Mastercard logo. The card is partially visible, showing the top left corner with the red and yellow Mastercard logo and the word "Debit" in white. The background is dark and out of focus.

Frictionless  
payment processing

After investing time and resources to streamline the booking process, the last thing travel brands want is losing the sale to a cumbersome check-out process. Consumers are still very cautious about their booking choices, and even little inconveniences can cause them to abandon their purchase and seek another supplier.

New mobile payment options will make it easier to close the sale sooner, while also enhancing payment security. A lot of airlines are starting to adopt an Apple Pay experience for iOS and Google Wallet for Android. This offers increased simplicity as the operating systems (iOS and Android allow customers to store their credit and debit card information on the device. So, even if the app doesn't support it, the device allows you to simply fill out the form. Additionally, in China, such adoption is already happening with Alipay and Union Pay, not to mention the option of PayPal.

New mobile devices, which are introducing biometric readers such as Apple Touch ID, will also enhance the security of these transactions over time whilst eliminating a point of friction in the booking process.

Mobile transactions are also likely to become even more popular over time because they are inherently more secure than browsers for online shopping, especially when an app is

“ It allows for easy input via fingerprint rather than lengthy password and verification methods. Companies like Alibaba and Xiaomi are also exploring secure log-ins via facial recognition and Retina scans. Over time, the idea of a password might change. Verification would be with the device and biometric information.

Filip Filipov | VP Product Management

tied to the phone—requiring the use of Touch ID to open the app, for example. In this case, you combine online verification—passwords and accounts—with locally stored information such as Touch ID. While one of them might be compromised, it is rare both would be. Also, in terms of payment security, mobile is further ahead than computers and verification can be more easily introduced.

To reduce friction on Skyscanner, we have incorporated seamless payments into the Direct Booking platform through the **integration of Braintree's vault** and payment forwarding API. It can securely share payment data and consumer information with airlines and online travel agents regardless of their payment processor.

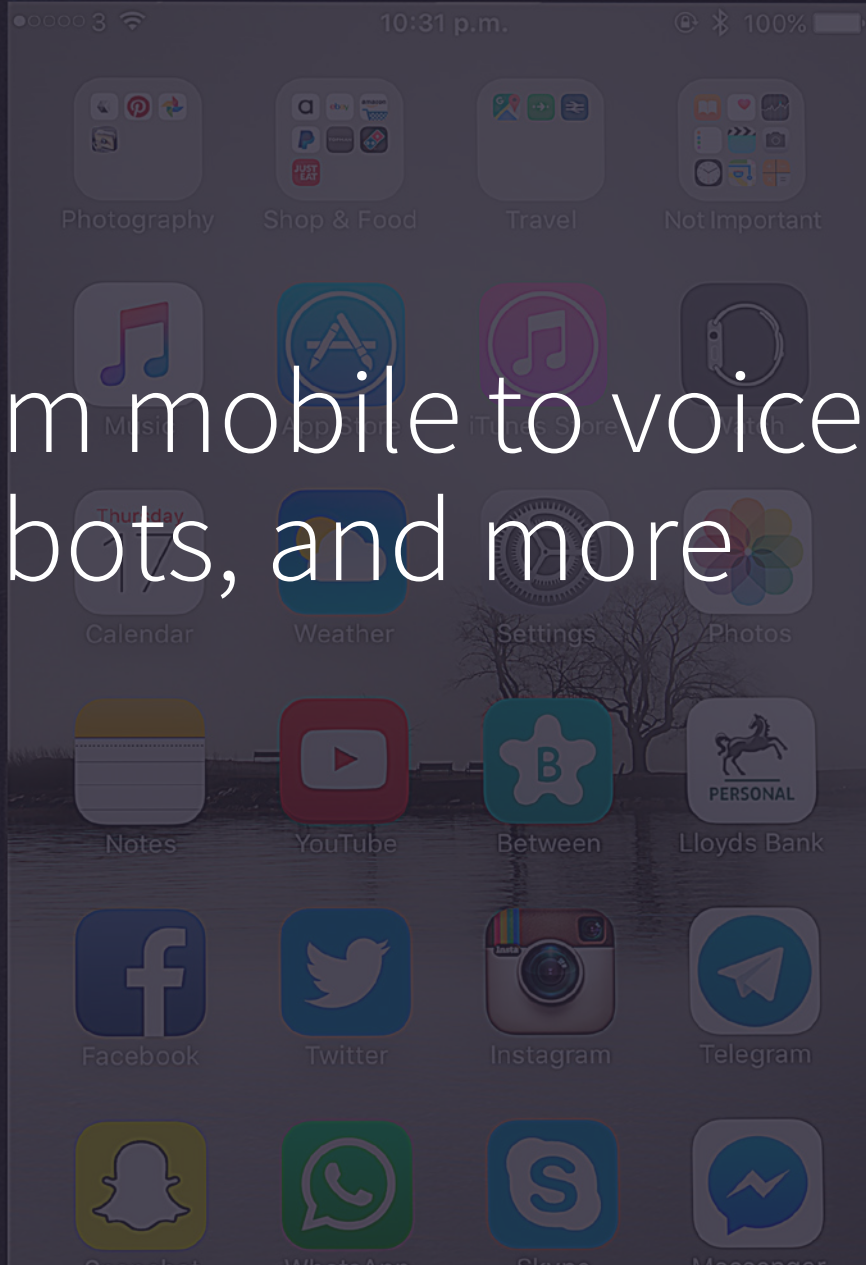
As a result, consumers enjoy a quick checkout. They don't have to enter payment details for each new transaction, which also encourages return business.

“ Ultimately, the payment happens as a check out that is familiar to buyers and users today, in the form of payment method input and verification.

Filip Filipov | VP Product Management



From mobile to voice,  
bots, and more





While mobile today generally means mobile-device ready, the essence of mobile is mobility—being free to get things done beyond the desk—and in the future, this will include an increased reliance on bots and voice assistants. Travellers will migrate from the click-type-tap patterns that are common in apps and sites, to a more conversational format in which they ask fairly casual, but fully-loaded questions.

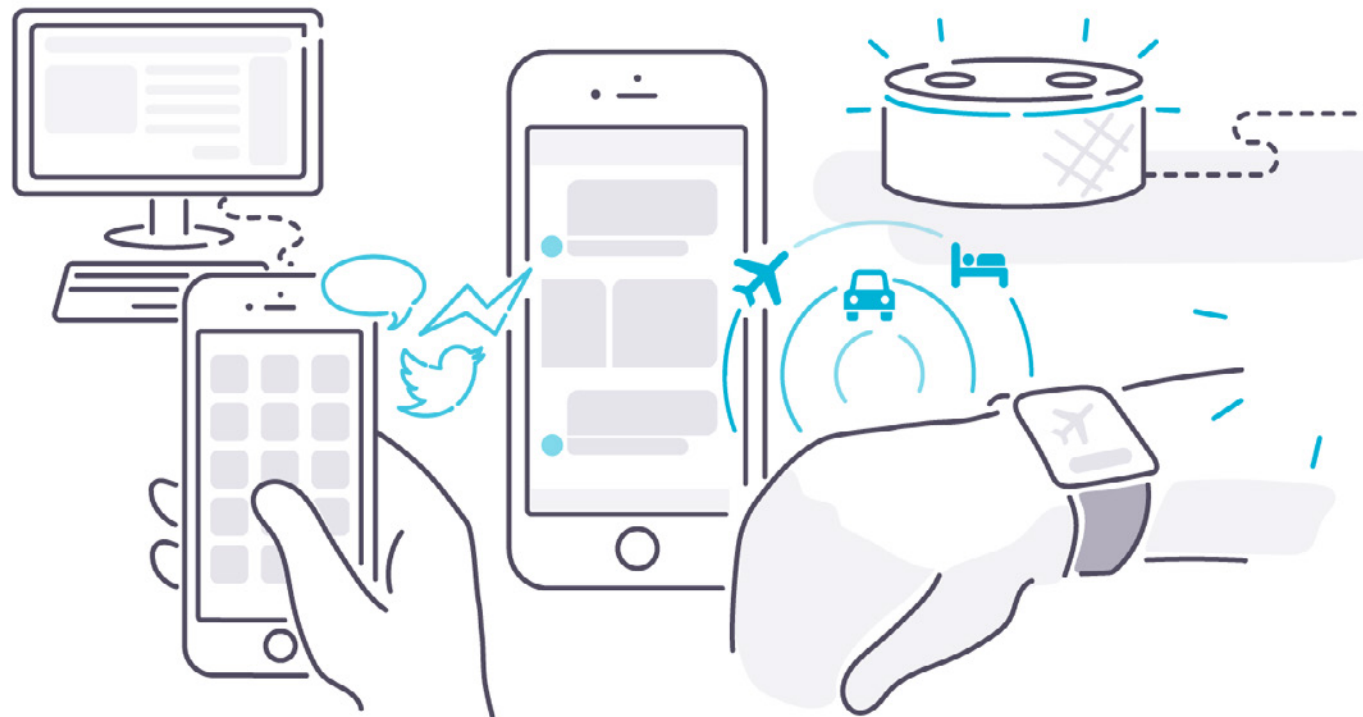
Recognizing the bots and voice trend, Skyscanner became an early entrant and pioneer of the technologies. This required an evolution from delivering complex answers

to simple questions, such as “who flies cheaply from A to B”. And then on to providing simple responses to complicated ones. It also required a commitment of resources, in the form of our dedicated Bots team, which has already led to four major product launches in the conversational and bots space: a skill for **Amazon’s Alexa** voice service; **a bot for Facebook’s Messenger platform**; a collaboration with **Skype** for the new Skype bots platform; and a **skill for Microsoft’s Cortana**.

These types of innovations in travel search technology allow Skyscanner, and as a

result our partners, to open up to brand new audiences and engage in new and exciting ways with existing ones. Making travel search as user-friendly and intuitive as possible, while embedding more into services and platforms that consumers engage with every day, will ultimately benefit our users, partners, and the wider industry.

As more diverse search platforms emerge, it is critical to retain simplicity and intuitiveness. We are living through a dramatic shift in our relationship with technology, as we move away from form-based queries to natural language searches via bots and voice assistants.



The key requirement is to make interactions with the user interface natural and familiar, avoiding miscommunication while delivering actionable information.

For bots and natural language search in general, there are some key areas of complexity around the travel domain itself – particularly in accurately understanding single or multiple locations, dates and travel preferences. As the scope of solutions broaden to cover customer

service scenarios, in many ways the challenges become less complex, as identifying and understanding “How do I cancel my ticket?” is substantially simpler than understanding the full meaning of “I need to get to a conference at ExCeL next Monday and I have to arrive in the morning.”

Beyond natural language handling, the variety of responses and flows – including in some scenarios hand-off to human

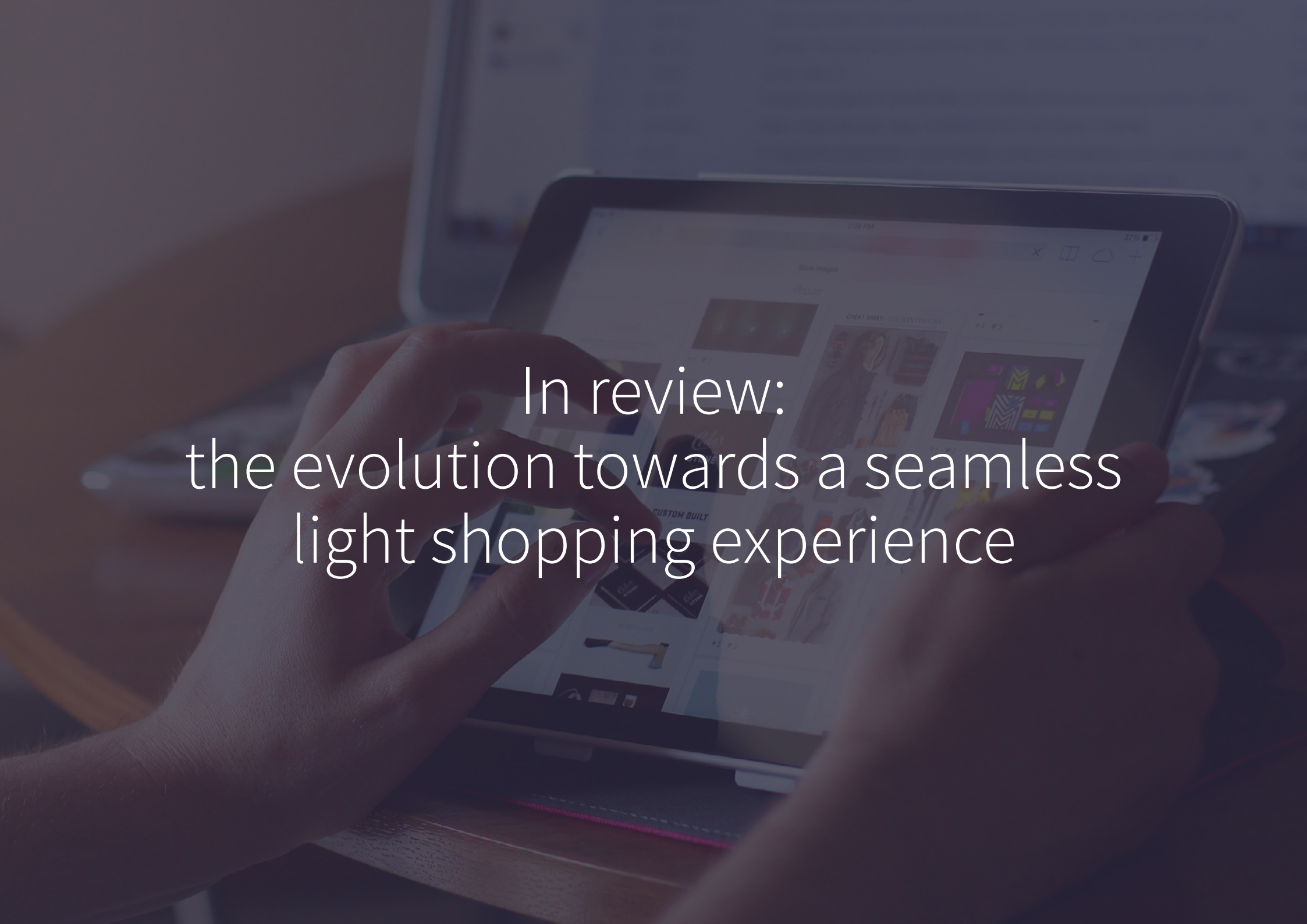
operators – becomes a new challenge. As does securely integrating personal booking and itinerary data. However, designing for these advanced interactions is essential to deliver a streamlined design across all platforms.

There will undoubtedly be a lot of experimentation in this area as it clearly has the potential to provide increased convenience to travellers, and can serve to enhance mobility and trust whilst reducing friction.

“Traditional web and app experiences have generally kept customer service and broad travel queries siloed from the core search funnel, and early efforts on bots have continued to follow this pattern. We see this evolving in both messaging bots and hybrid experiences, where natural language support is layered on top of a traditional web/app flow, to bring customer service and question answering together with search. The key challenge is adding more capabilities without over-complicating the interface and negatively impacting usability, which can be greatly assisted by natural language and contextual understanding.

When we look at the distribution of common queries we receive, many of the most popular questions can be answered by content currently in FAQs and other support documents. Whilst providing more effective and convenient content search is an improvement, there is also a lot of scope to provide customised actionable answers rather than generic information. For example, “How do I cancel my flight?” would be far better answered with “Which flight would you like to cancel?” and a list of a traveller’s bookings with one-click cancellation, than by a document detailing methods of cancellation.

Much of the real effort and impact comes from the traditional product development tasks of user experience design, integration of disparate data sources and services and constant incremental improvement. We believe travellers will start seeing the benefits of increased natural language and contextual understanding and personalization in travel search in the short term and are actively working on bringing this to our customers.

A person's hands are shown interacting with a tablet. The tablet screen displays a shopping application interface with various product categories and items. The text "In review: the evolution towards a seamless light shopping experience" is overlaid on the image in a white, sans-serif font. The background is a blurred indoor setting, possibly a desk or a table, with a laptop and other items visible in the distance.

In review:  
the evolution towards a seamless  
light shopping experience



Looking at today's retailing and booking environment, it is evident that travel retail needs to evolve. Most companies have yet to offer users a frictionless experience that enables them to easily progress from discovery, to search, to booking.

From a search perspective, this can be improved by delivering a manageable interface, which provides relevant results and inspires users to book that next trip. Shifting from a price focus to a value-based system, which surfaces information such as fare classes and baggage allowance up front, will also help users to filter for the options that most closely meet their needs.

As discussed, the travel booking process is also cumbersome. Retailers need to provide neat and intuitive booking interfaces, which enable customers to easily select and deselect the ancillary options available, and respect the time of users. However, they also need to deliver convenient payment solutions that encourage 'instant booking' – instead of losing purchases at the point of payment.

Finally, mobility is also critical, and must not be undervalued as consumers move further and further away from their desktops. And to keep in-step with users, companies must adapt and adopt at the same pace –

making experimentation with UX and UI a core part of their evolution.

Having recognized the importance of growing with our users, Skyscanner has addressed the need for seamless retailing, booking, and payment in its mobile-friendly Direct Booking solution. And whilst we hope our partners will undertake their own steps towards such an offering for their users, we are also excited to be onboarding partners and delivering their inventory to our users.

The success stories to date prove that Direct Booking, and capitalising on the features of NDC and ONE Order, represents a step into the future of retail. And we look forward to driving it forward, and advancing our solutions with our users.

“ We've worked closely with IATA and with our airline partners to make sure what we are doing with Direct Booking is the best way to buy flights on the Skyscanner platform. But I think we've also helped to show what works and what doesn't work for airlines' own strategies as they contemplate what it means to participate on Alexa or Google home. The wider NDC initiative is part of that leap into a new, more mobile, booking environment.

*Gareth Williams* | co-founder and CEO

Interested in learning more about our work  
with Direct Booking, and our views on distribution?

Read our  
**‘Vision for the future of distribution’**  
white paper!