WHITE PAPER

Allora.ai creates a personalized booking experience for every guest, which drives engagement and unparalleled guest conversion and is supported by digital marketing with outstanding website design.

ABOUT

Founded in 2002, Avvio specializes in the science of direct guest acquisition for hotels.

In 2017 Avvio launched allora.ai, the world's first hotel booking platform powered by artificial intelligence.

Allora.ai creates a personalized booking experience for every guest throughout the online journey, driving brand engagement and unparalleled guest acquisition on the direct channel.

As of January 2021, allora.ai has nurtured over 400m direct guest journeys across hundreds of independent hotels.

Building on the value created to hoteliers by personalizing the guest booking journey on the direct channel, allora.ai now takes on the challenge of reducing booking cancellations.

May 2021 sees the launch of the allora.ai - Booking Retention Engine™, protecting hoteliers from the rapid growth in direct cancellations whilst improving the profitability of the direct channel and associated marketing efforts.
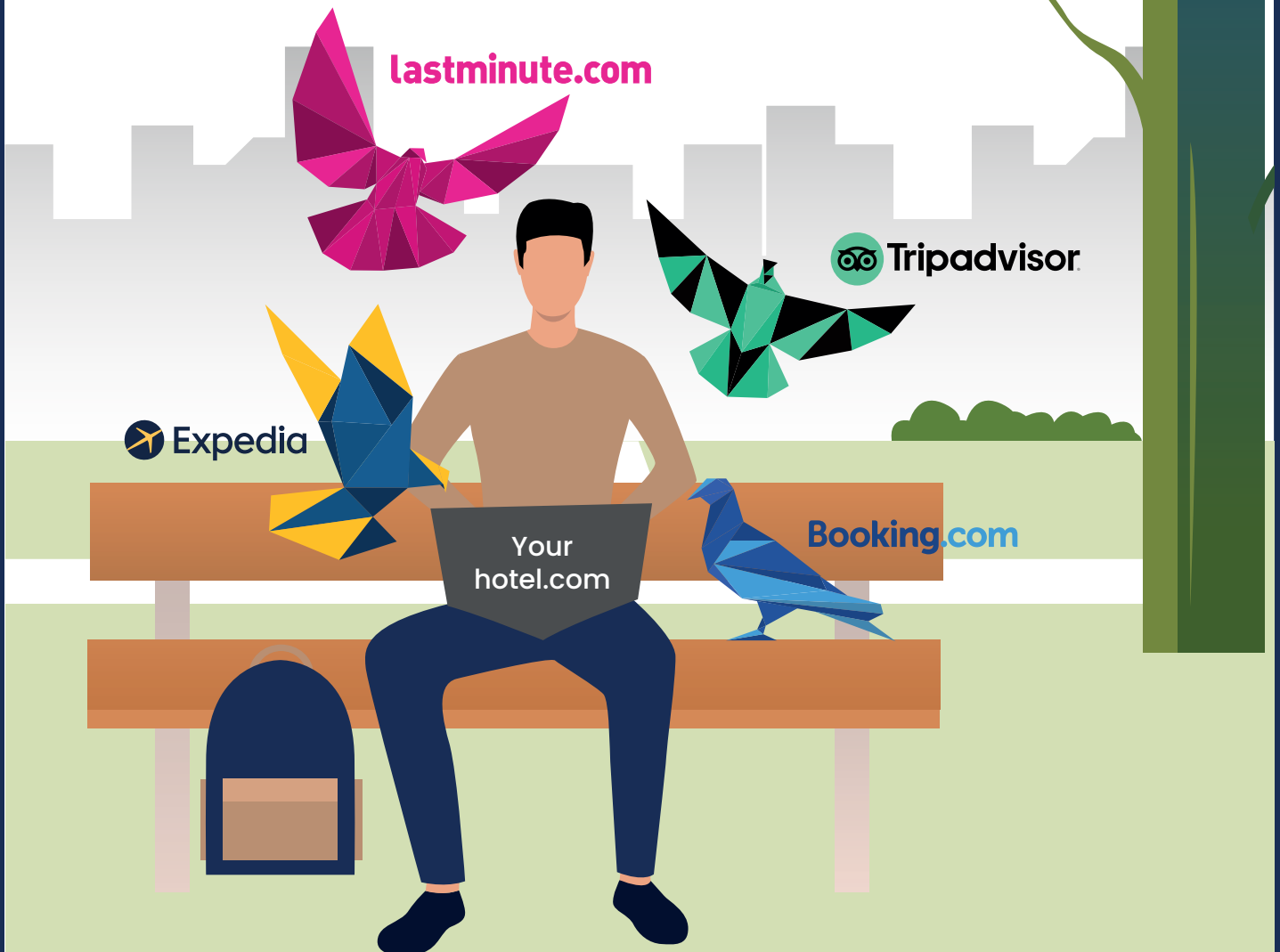
ABOUT THE DATA

We have analyzed millions of transactions from hotel websites over the period of 2016 to 2019, including hundreds of properties in multiple geographies that include Ireland, the United Kingdom and the USA. Data presented, unless otherwise noted, relates to bookings and cancellations via the hotel's "direct" website channel.

allora.ai

CONTENTS

WE NEED TO TALK ABOUT
CANCELLATIONS

lastminute.com

Tripadvisor

Expedia

Your hotel.com

Booking.com

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01

EXECUTIVE SUMMARY

1. Analysis of a subset of 2.3 million direct booking transactions across 400 independent hotels shows cancellation rates rising steadily every year. The share of direct booking revenue lost due to cancellations has risen from 11% in 2016 to 15% in 2019.

CANCELLATION RATE

2016	2017	2018	2019
11%	12%	13%	15%

36%
INCREASE
in cancellation rates from 2016 - 2019
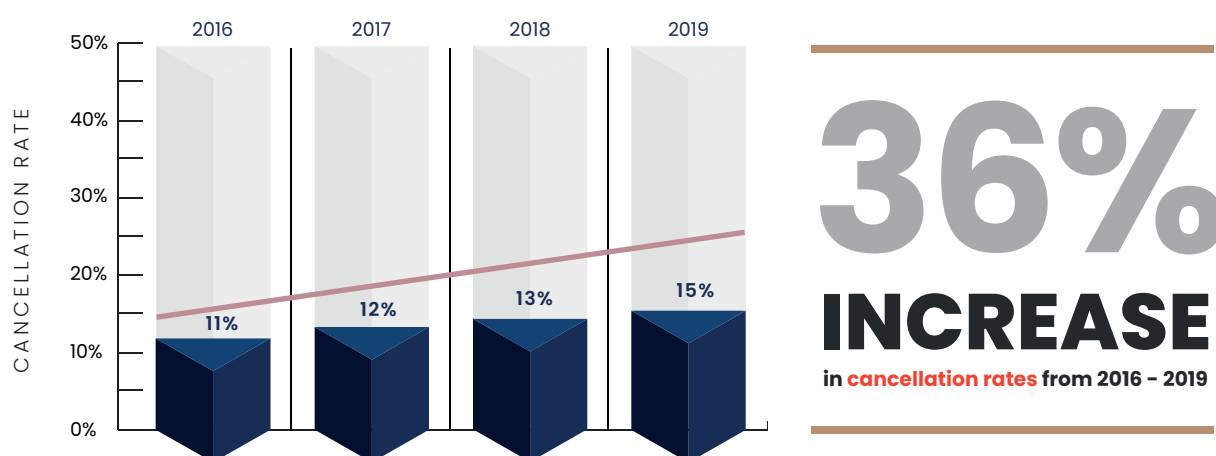
2. **Digital Marketing Inefficiency**: An extrapolation of our dataset leads us to estimate that in 2019 alone over £11.5m was spent by UK hoteliers on paid digital marketing activities for direct bookings that were subsequently cancelled without penalty[1].

3. Avvio predicts that in 2022 hoteliers will experience **direct cancellations in excess of 20%**, as guest' expectations of booking flexibility - ushered in by COVID-19 - combines with the highly competitive market conditions and likely increase in guest loyalty programmes of OTAs as they deploy strategies to capture share.

4. Avvio therefore strongly advises hoteliers to consider strategies and technologies for **Booking Retention** in addition to the current focus on acquiring direct bookings.

5. We also encourage hospitality digital marketers to evolve the established KPIs such as Cost Per Acquisition and campaign ROI when calculating digital efficiency. Efforts should be made to go beyond the acquisition of a flexible booking as the principle success metric, to understanding the insights behind direct cancellations and supporting strategies for **retaining guest bookings**.

02

UNDERSTANDING CANCELLATION TRENDS

WHY ARE CANCELLATIONS ON THE RISE?

Guest behavior is changing

It is widely reported that even before COVID-19 cancellation rates on OTA bookings were high relative to other booking channels and trending up. Some studies have shown OTA cancellations as high as 41% based on the channel and geography[2].

Rather than requiring deposits to secure a booking, these channels now emphasise the option of "free cancellation" - with ease - to potential guests. This has led to a rise in **Booking Infidelity[3]** as travellers today continue to research hotels long after their initial booking, sometimes booking multiple properties safe in the knowledge that their unwanted booking can be cancelled easily and without penalty later on[4].

A steady creep of the same buying behavior is now evident on the direct channel. Avvio data shows up to 7% of direct bookers hold multiple hotel bookings for the same stay dates in 2021.

Unless hotels mitigate this by adopting new strategies to retain bookings, we predict that this behavior will grow faster in the coming years as new technologies emerge allowing a guest's booked rate to be monitored post-booking, and automated rebooking tools become more common. Indeed, we expect the OTA channels to lean into the practice of "automated cancel and rebook" thereby ensuring that bookers get the best possible deal, should prices drop post-booking.

At the sharp end, we expect this trend will have a very negative effect on profitability for hotels unarmed with a Booking Retention strategy.
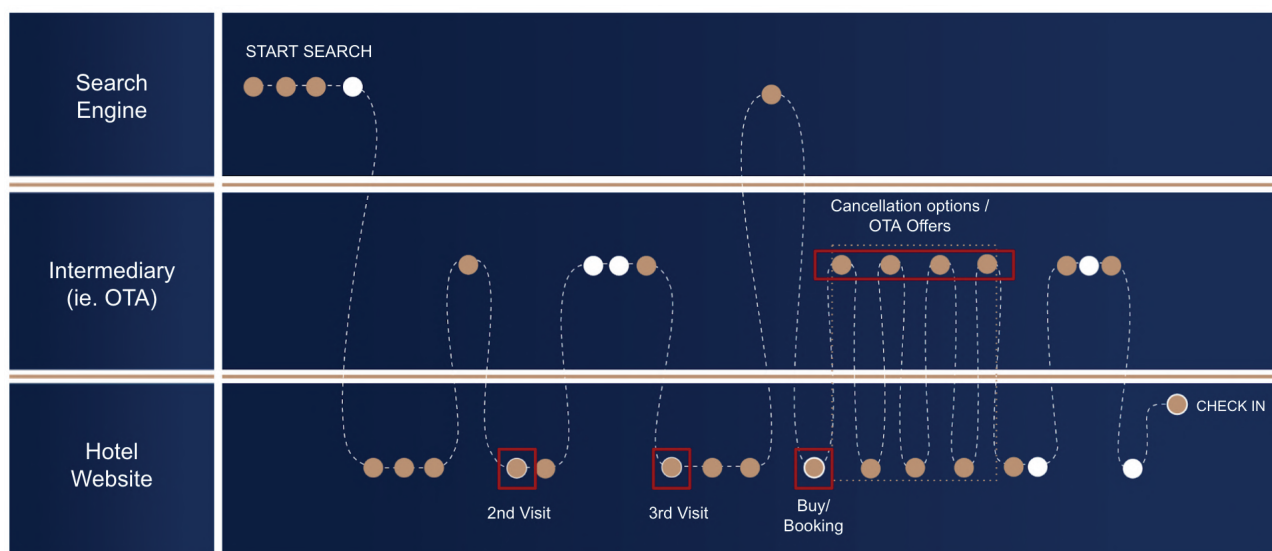

Studying the customer journey shows that guests research across multiple online channels (OTA, Direct, Metasearch and others). The battle for the guest continues long after initial direct booking has been made as remarketing strategies kick in for all travel channels.

> "
>
> *Cancellations are the silent killers of hotel profitability. Managing cancellation ratios is emerging as key to retaining booked revenues. Allora.ai gives the revenue team greater insights into how to identify those vulnerable bookings. This type of insight can help shore up post-booking marketing and guest retention strategies, and reduce the exposure to revenue dilution from customer acquisition strategies that subsequently cancel, or the consequences of lost revenue from empty rooms that remain unsold.*
>
> *Ally Northfield, Managing Director, Revenue by Design*

Revenue By Design
Revenue Management Solutions
that transform business
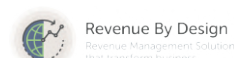
UNDERSTANDING CANCELLATION RISK FACTORS

"Past behavior is the most reliable predictor of future behavior."

Many people lay claim to this insight but, when we relate this to booking cancellations, we question whether hoteliers have an accurate picture of past behavior to be able to predict future behavior.

Here are just some of the data points hoteliers and marketers should have at their disposal:

Which guests cancel?

A guest segmented analysis can be a powerful starting point in building insights. In the graphic below you can see the proportionate share of direct bookings cancelled by each segment for a typical urban hotel.

Cancellation Rate by Segment

■ Family ■ Couple ▪ Business ▪ Multiroom

Year
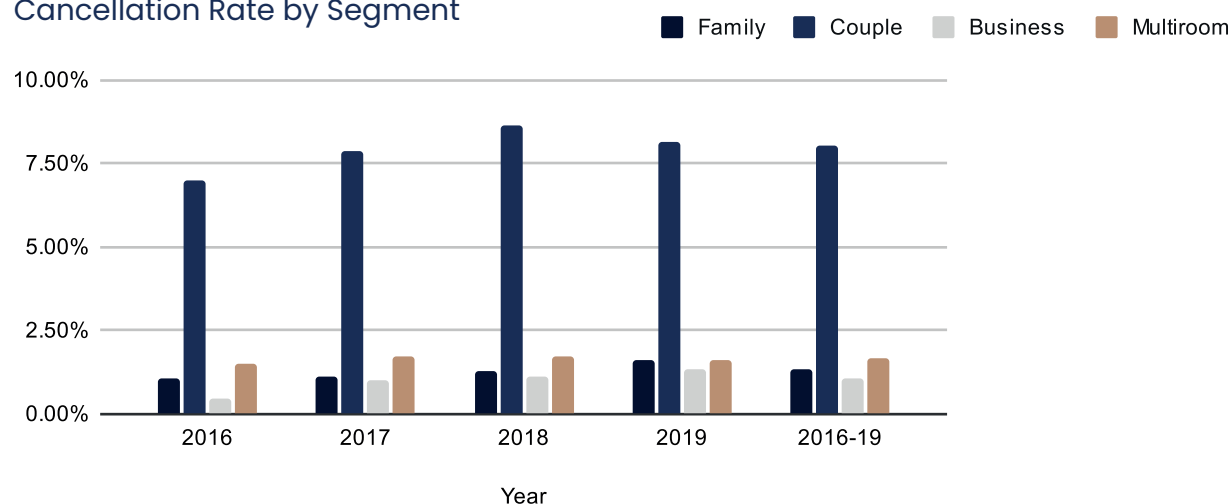
You will notice here that couples have a much higher cancellation rate than family bookings.

Revenue Share by Segment

66.7%

13.6%

8.7%

11.0%
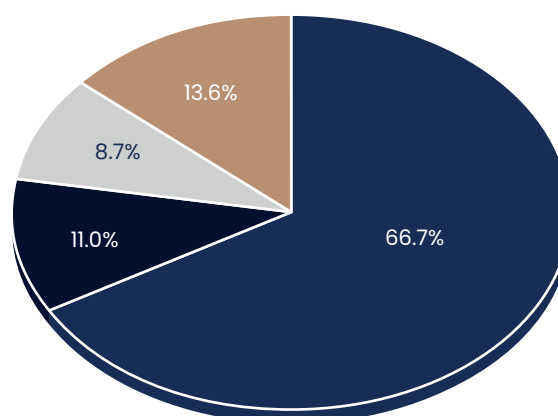
How does lead-in time to arrival affect cancellation rates?

The chart below shows a high number of guests cancelling their stay within 7 days of their intended arrival date.

Cancellation Lead-in

How many days before arrival do your guests cancel. Based on previous 2 years

> It's clear that tackling the problem of cancellations is more urgent than ever. By leveraging forward looking data and predictive modelling, revenue managers will be able to unlock much deeper insight and target post-booking retention strategies with greater precision.
>
> Allora.ai represents a significant step change and is defining a whole new category of guest intelligence software for hotels.

Sean Fitzpatrick, Chief Executive Officer, OTA Insight

OTA INSIGHT

BOOKING CANCELLATION INSIGHTS

03

THE COST OF CANCELLATIONS

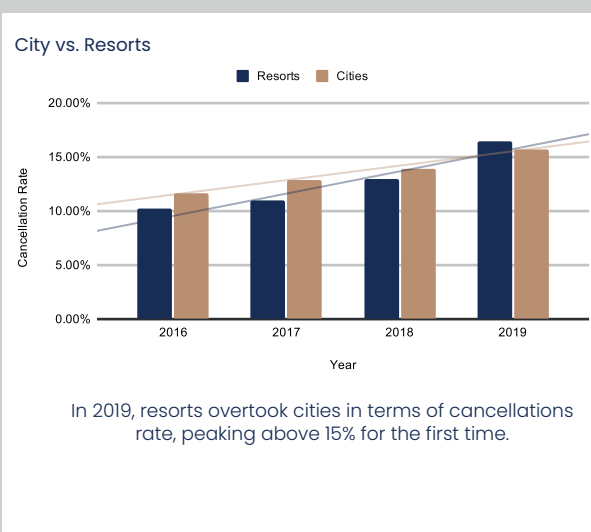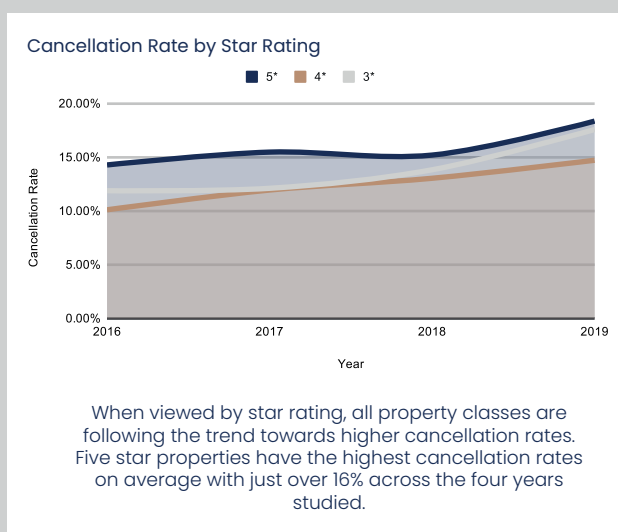## *A NEW LOOK AT THE COSTS OF BOOKING-WASH*

It is generally accepted that cancelled bookings (or 'booking-wash') are a negative outcome for most hoteliers in most circumstances. The scale of the impact is determined by a number of factors and the constraints of demand on any given day are critical. So too is the lead-in time of cancellation ie. how much notice does the hotel have to resell the cancelled inventory - seasonality, price and market factors can have a very significant impact on the likelihood of reselling a room.

The cost and challenges can be even more severe in the event of a no-show (a cancellation with little or no notice from the guest) where, in the worst-case scenario, the room remains unoccupied. Whilst it is common procedure to enforce a no-show cancellation policy, not all efforts to secure a penalty payment are successful.

Aside from the administrative cost & effort, there is also a knock-on impact for any subsequent days the guest was expected to stay. These days could remain unoccupied or dilute RevPar on resale, the severity of which will be dependent on the demand factors at play and other variables such as property type.

PROPERTY TYPE TREND SPOTLIGHT

Our data shows that property type overall can have a significant impact on cancellation rates. Here we have studied some of the familiar categories:

Cancellation Rate by Star Rating

When viewed by star rating, all property classes are following the trend towards higher cancellation rates. Five star properties have the highest cancellation rates on average with just over 16% across the four years studied.

City vs. Resorts

In 2019, resorts overtook cities in terms of cancellations rate, peaking above 15% for the first time.

Overbooking strategies can help reduce some of the financial cost associated with vacancies but such tools come with their own risks. Overbooking strategies can be a serious risk to reputation. Even with dedicated tools tasked to aid hoteliers, negotiating the tight-rope of selecting the right guests to disappoint can be time intensive and stressful. Negative publicity via online channels like social media and review sites could easily damage sales in the future and, if severe, impact existing business on the books.

> *"Hoteliers are typically unable to recover the same per-booking value lost to cancellations."*
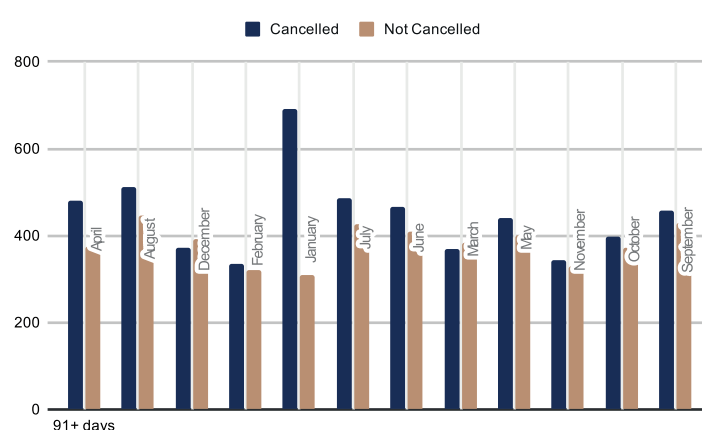
There are other important strands attached to the cost calculation when we go beyond resale in the event of a cancellation. 'Opportunity cost' (an attempt to measure the loss or gain that may have been otherwise received) is a useful lens in which to understand this. Success here can be judged on the ability to replace a cancelled booking with one of equivalent or higher value. Our research however shows that the average booking value (ABV) of cancelled bookings exceeds the ABV of remaining, un-cancelled bookings. Our data indicates this could be as much as 41% higher compared to non-cancelled bookings.

We find that January is one of the most costly months in terms of ABV fall off, especially for those bookings with a lead-time greater than 90+ days. This may reflect promotional activity, with hotels lowering rates to account for occupancy but to the detriment of retaining high value bookings secured well in advance.

Last minute cancellations in particular can create a very challenging situation for hoteliers as the probability of reselling a room at short notice can sometimes be very low. Hoteliers are then faced with a potential loss making situation for that room/day. Multiplied over many rooms and dates the total can be significant.

Perishable inventory lost to late cancellations can also be a significant cost to swallow for some.

We found that 37% of cancellations occurred within 7 days of arrival between 2016 and 2019.


Lead-Time: Cancellation to Arrival Date (2016 - 19)

Legend: 0 - 7 days, 8 - 14 days, 15 - 21 days, 22 - 28 days, 29 - 60 days, 61 - 90 days, 91+ days
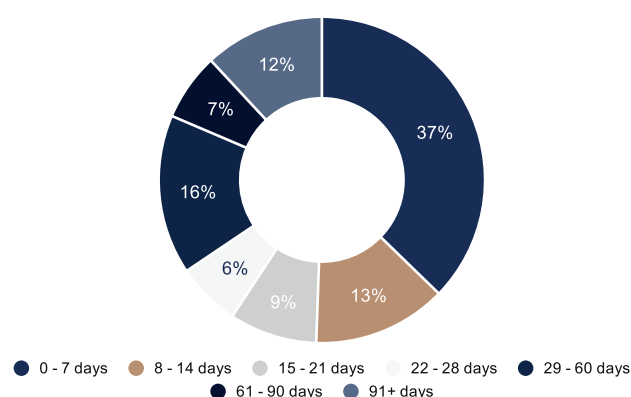
There are also trade-offs in terms of distribution costs. If a high-value direct booking for example is cancelled and replaced (whole or in part) at short notice through a more costly channel like an OTA, then this is another example of margins being eroded for hotels.

BOOKING LEAD-TIME TO CANCELLATION SPOTLIGHT

Data shows that longer booking lead-times present a stronger likelihood of cancellation on average.

Lead-Time Cancellation Share
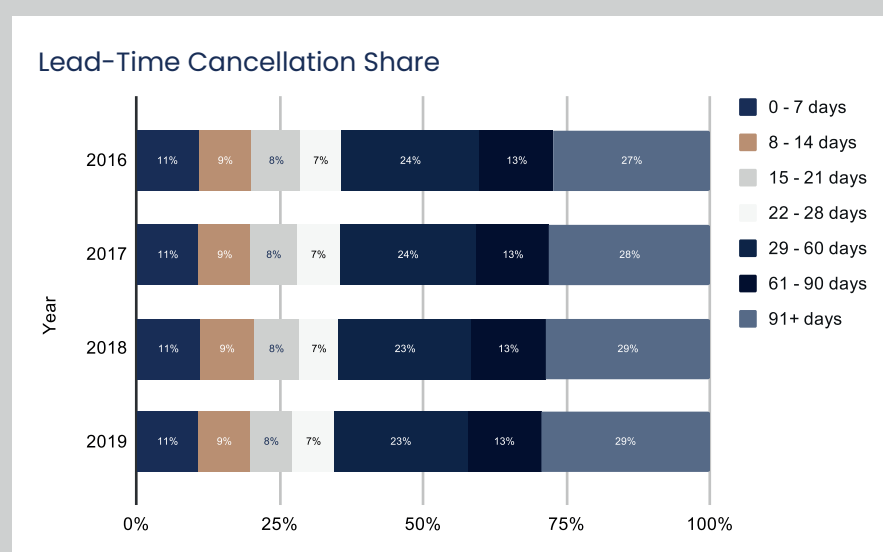
This is particularly noticeable for reservations booked with a 90+ night lead-time to arrival. In total, 65% of all cancellations occur with a booking lead-time greater than 29 days. 90 days alone accounts for 29% of the total and has been growing steadily over recent years.

CANCELLATION RATE

When assessing cancellation rates by booking lead-time it is evident that the longer lead times show higher rates on average.

Cancellation Rate by Lead-Time

14
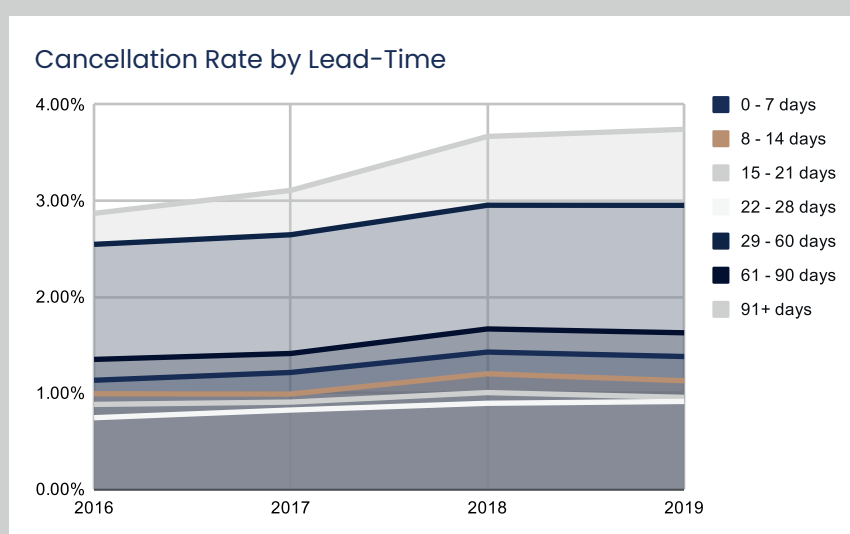
Different guest source markets (ie. domestic or international) often represent a marked difference in average booking value. For example, an international family is typically more likely to book a longer stay than a family coming from a domestic market. International guests may also represent a significantly higher value in terms of ancillary spend (as they are more reliant on on-premise F&B outlets, more likely to have booked full-board etc). A late cancellation could therefore increase the dependency on domestic bookings in order to fill occupied rooms at much lower value.

Reputation is a key reflection of a brand's overall appeal and is a strong consideration factor in the booking journey. Indeed a recent joint study by Bain & Google showed that the booking uplift attached to a positive brand experience was as high as 25%[5].

Today's guest is often looking for affirmation of their choices. They want to make sure their decision to book in December still feels like the best decision in July when they are packing their suitcases. Guest reviews as a form of social proofing may be just as relevant post-booking for traveller and property types and are particularly important for bookings with a longer lead-time.
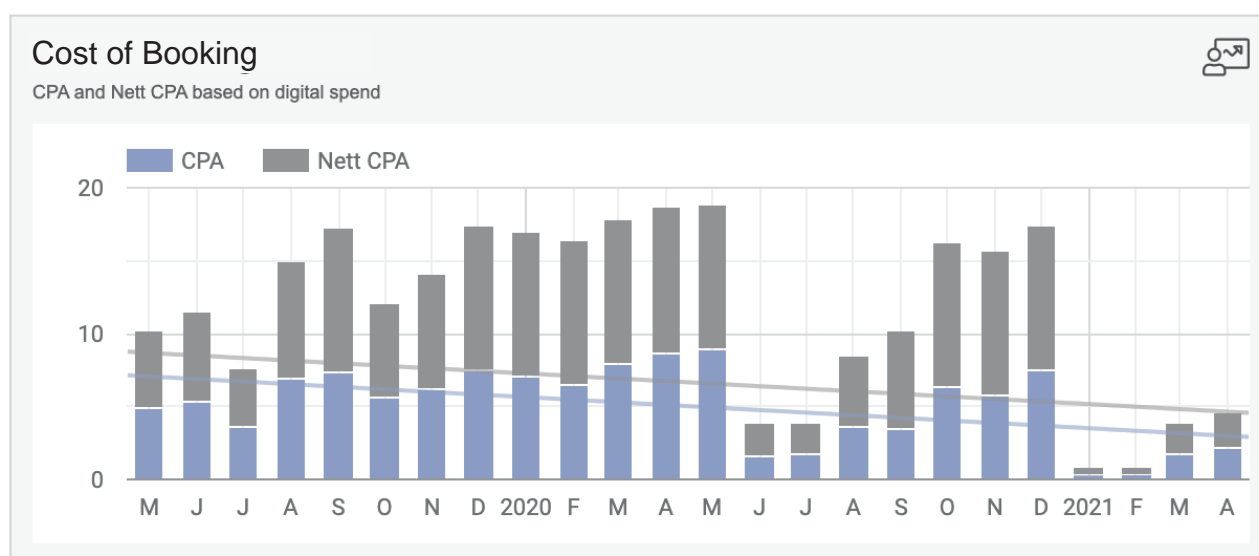
DIGITAL MARKETING INEFFICIENCY

Hotels and agencies together tend to view digital marketing ROI based on the spend required to deliver direct bookings without taking cancellations into account. So too does the Cost Per Acquisition (CPA) metric typically ignore the ever growing cancellations challenge.

Without an understanding of which bookings turn into real guests (and which cancel), any assessment of marketing performance will be overly optimistic today, with accuracy diminishing further over time as cancellations trend upwards.

Digital performance can be significantly improved by going beyond the flexible "booking event" as the ROI/CPA measure and instead adopting the stayed guest (or Nett CPA) as the only robust measure of success.

As the chart below demonstrates, this shift in emphasis allows us to reveal the true digital cost of sale when we take cancellations into account.

Cost of Booking
CPA and Nett CPA based on digital spend

> "To base digital marketing success on the metrics of (flexible) bookings acquired rather than **real stayed guests** is to accept inefficiencies today of 20% and growing."

Frank Reeves, Co-founder & CEO, Avvio

04 BOOKING RETENTION

BEYOND SEGMENTATION

Whilst COVID-19 has contributed a lot of noise to our datasets, the insights that can be gleaned from historic cancellation data (2019 and earlier) provide a solid platform for a hotel to develop an understanding of how guest segmentation relates to cancellation behavior. It will be critical for example to understand that, at your hotel, domestic couples may be 7 times more likely to cancel than international families.

Knowledge of which segments are more likely to cancel will help hoteliers to develop a plan to retain these guests. As such, this is the starting point in building a **booking retention strategy**.

However, with the right tools, it is possible to go beyond segmentation and look at which individual bookings within a segment are at higher risk of cancellation. For example, to predict which international couple will be more likely to cancel than another.

Rather than looking at 1 dimension of data (eg. traveller type), this fine-tuned approach leverages **Artificial Intelligence** to take a multidimensional view, incorporating data based on the individual guest journey, market conditions at time of booking, what has changed since the booking, and more.

PREDICT

PERSONALIZE

RETAIN.

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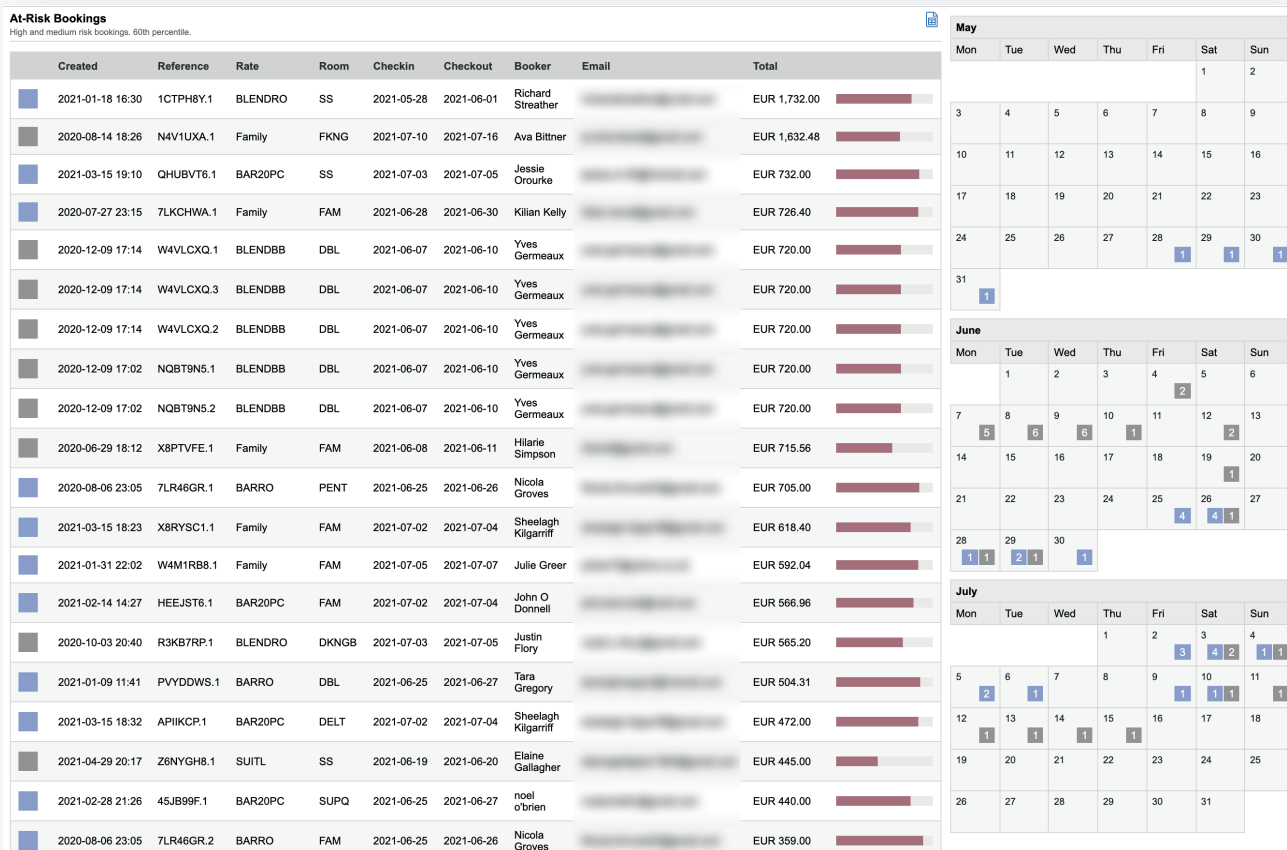
PREDICT

PERSONALIZE

RETAIN

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The Science of Direct Guest Acquisition

#knowyourguest

The result of which is a per-booking **cancellation risk score** which adapts to the dynamic conditions of the market as factors that may increase or decrease the likelihood of cancellations change as shown by this image.

Revenue managers will pay closer attention to those days where 'on the books revenue' is at greater risk than others, and retention efforts should target the higher value bookings first (as indicated below).

PREDICTING CANCELLATION RISK

The following factors, in addition to the above, are among many assessed by the **allora.ai prediction engine** when assigning a cancellation risk score to each booking:

- Brand Engagement: quantifying the time invested by a guest pre- and post-booking, whether relatively long or short, in addition to other engagement signals in that journey, can provide rich context. Those less invested may show a higher propensity to cancel. Equally those who are repeat bookers and already familiar with a brand may score low in engagement terms for a reservation but are ultimately low in terms of cancellation risk. Again underlying the importance of multi dimensional analysis.

- Referrer: did the booking event arise from an initial session with a price-comparison product or metasearch site like Trivago or was the journey more organic in nature or perhaps triggered by a marketing campaign, promotion etc.

Brought together, this layering and granularity helps us to identify significant patterns in large quantities of data and create a single system that can help hoteliers to visualize and monitor risk at the guest level in real-time.

Here the interplay between dynamic variables that change over time means we must rely on real-time market data and the power of machine learning in order to accurately predict the likelihood of a cancellation event.
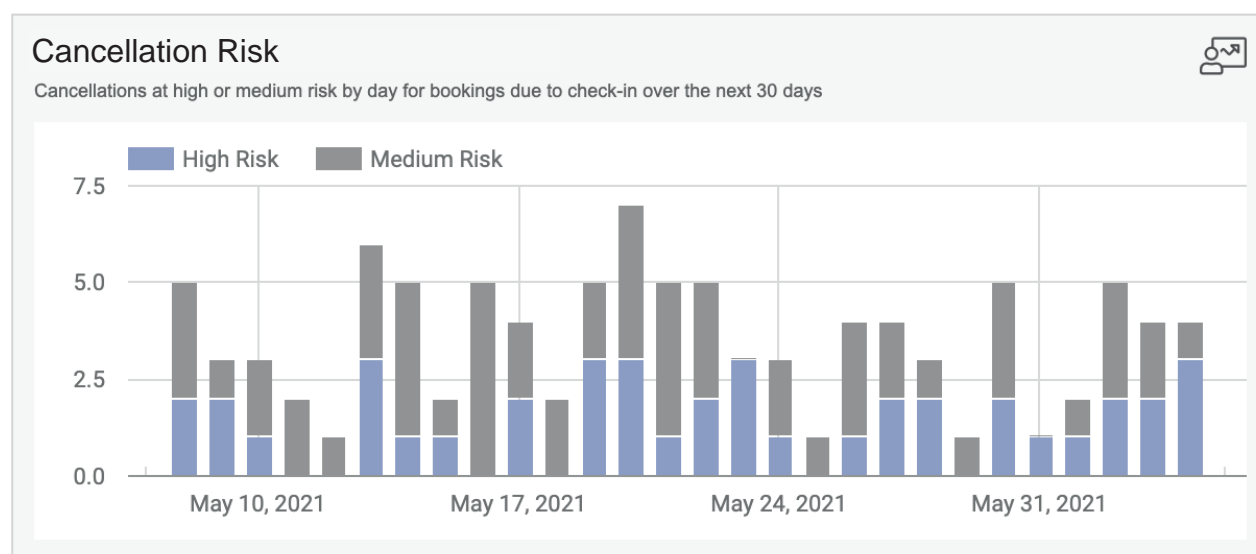

Chart showing relationship of risk & value for business on the books.

A BOOKING RETENTION ENGINE

It should be noted that not all bookings can be retained as some may cancel due to necessity. We believe, however, that most cancelled bookings are guests that can or do travel but have been persuaded out of their direct booking with your hotel. Cancellations are often lost to competitors or partner channels such as OTAs. These are the guest bookings that could be retained.

> *"We believe that most cancelled bookings can be retained."*
>
> *Martin Grogan,* *Technical Director, Avvio*

RETENTION STRATEGIES & TACTICS

How to plan and execute on reducing cancellations

We see a complex set of forces impacting cancellation rates for hotels today and, to date, platforms and tools have not been focused on solving the problem. This partly reflects the often siloed nature of the hotel tech stack and how disparate systems do not have a shared view of the entire customer journey. Yet it is vital that hoteliers delve deeper into the analysis of cancellations in order to reduce costs, improve forecasting and bolster profitability.

For retention efforts to be truly effective, analysis should include competitor dynamics, like the price-position of a property relative to direct competitors and the market (city, local proximity). Historical data will provide context but, as we emerge from COVID-19, there will be increasing reliance on forward-looking datasets to make the best predictions.

Existing retention strategies fail primarily due to the inability of technology to identify bookings that are at risk of cancellation. Successful cancellation prediction tools allow efforts to be targeted towards retention strategies and on the upstream marketing functions that should emphasize the acquisition of bookings that are at less risk of cancellations from the outset.

SO, HOW CAN HOTELIERS PLAN?

MAKE USE OF CANCELLATION INSIGHTS:

- Start by analyzing the cancellation data by market segment and traveller type (family, business etc). Then break this down by channel, lead-in, rate and room. By knowing more about who has cancelled, it's possible to better understand the motivation and build a plan to mitigate them.

- Channel the same methodology to digital campaigns. Calculate the net CPA and spend efficiency so you can fine-tune your targeting.

- Map your high-value bookings over the next 30-90 days and prioritize them in nurturing efforts.

- Measure the impact of price changes on cancellation rates. At the same time, ensure you shop OTAs to ensure parity is maintained and that you are not being undercut.

PERSONALIZE AND ENGAGE EARLY:

- Guest communication post-booking is imperative. Understand the potential needs of your pre-stay guests and tailor your message to have maximum impact:

    - Ensure you deploy personalization at the guest level[6]. For example you should stand down your 'BOOK DIRECT' message for a returning guest that has already made their booking. A one size fits all approach to pre-stay communication is convenient but this does not value the hard earned attention of your customers.

    - Consider offering added value to the high cancellation risk guest in the form of discounted or complimentary onsite services.

    - Build anticipation - show relevant content to the guest reflecting their interests and what is happening at the time of their stay.
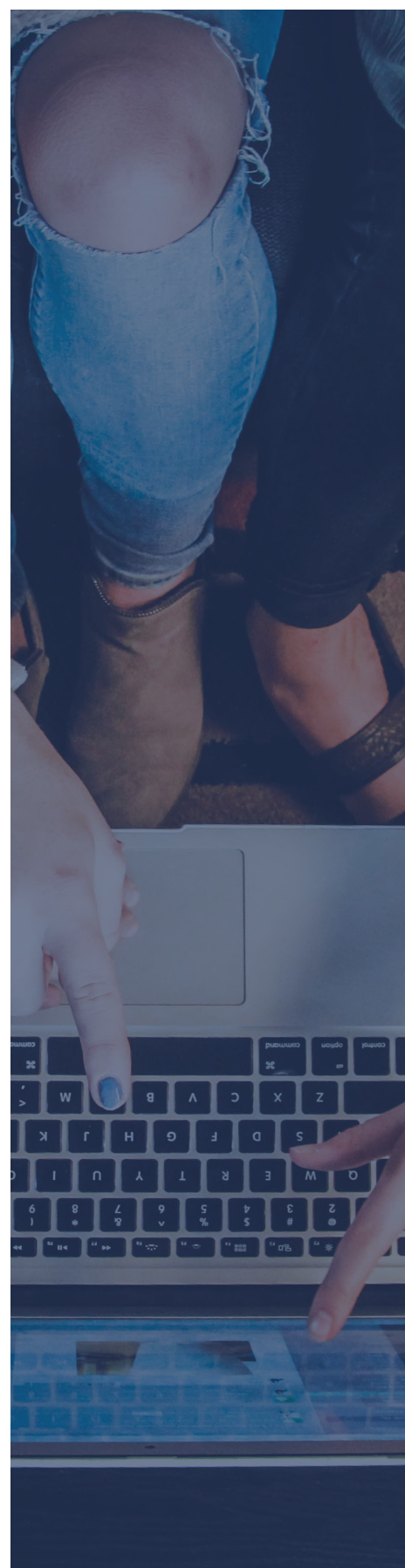
- Consider ways in which your brand can elevate above the "one size fits none" approach of your competitors and deliver more engaging **Online Hospitality experience** to your guest pre-stay (see allora.ai example below).
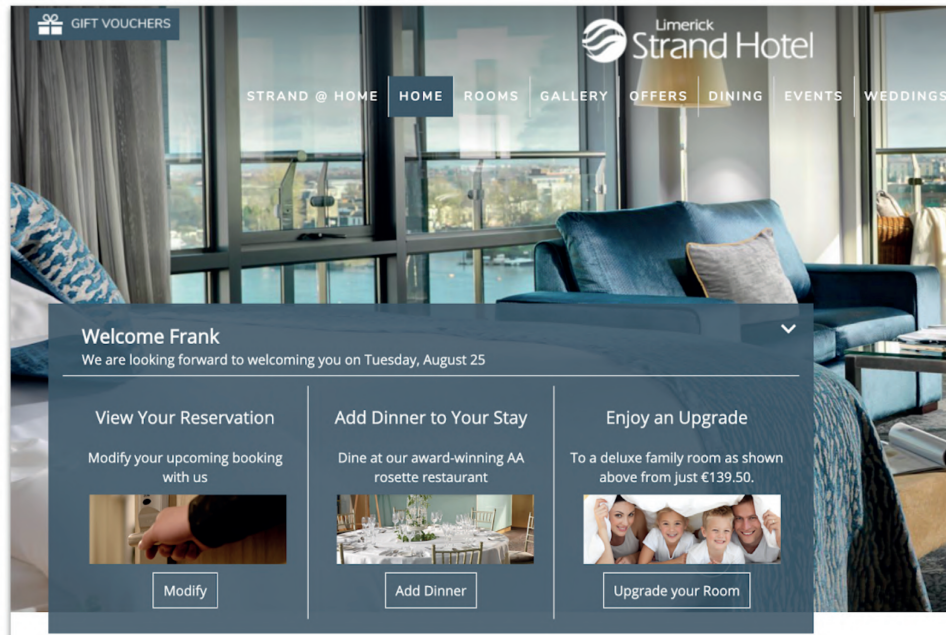
'TEST, MEASURE, REFINE' NEW BOOKING POLICIES:

- Use tiered cancellation policies to give flexibility but control the potential damage associated with last minute cancellations.

    - Create a 'cooling off period' to allow for changes post-booking but tighten up as the guest approaches the arrival date.

- Limiting the availability of flexible policies based on LOS and season can reduce the risk / value equation at a critical time.

- Use value based deposits during high-demand periods to raise commitment levels. These are value thresholds that ensure guests pay in part/full if the booking value exceeds a designated amount.

- Create stronger incentives to pre-pay with lead-time incentives.

CREATE 'TALK DOWN' MESSAGES AND INCENTIVES:

- Learn from the best e-commerce giants like Amazon. Don't be passive at the point of cancellation. Create compelling benefits for the guest to keep their stay with you.

- Consider offering free or discounted retention incentives aligned to the value of the guest booking (for example, "Enjoy a complimentary early check-in").

- Incentivize with a discounted gift voucher redeemable for a future stay.

05

CONCLUSIONS

As we reveal a better understanding of the customer journey and, at the same time, witness direct cancellations approaching 20%, hotels must evolve to prioritize '**guest acquisition**' over direct bookings in their analysis. Better decisions follow from better data!

With more and more marketing spend assigned to digital channels, the 'cost of acquisition' must move from the point of acquisition of a booking (ie. ignoring cancellations) towards the acquisition of a real paying guest.

Revenue forecasting that doesn't take into account the full impact of cancellations will increasingly undermine wider business goals. Hoteliers need to consider the whole timeline and detail the opportunity-costs attached to their strategies in order to optimize for profit. To do this hoteliers will need to utilize a new breed of tools that leverage A.I. and big-data to obtain a competitive advantage in the marketplace. Allora.ai is designed with this in mind.
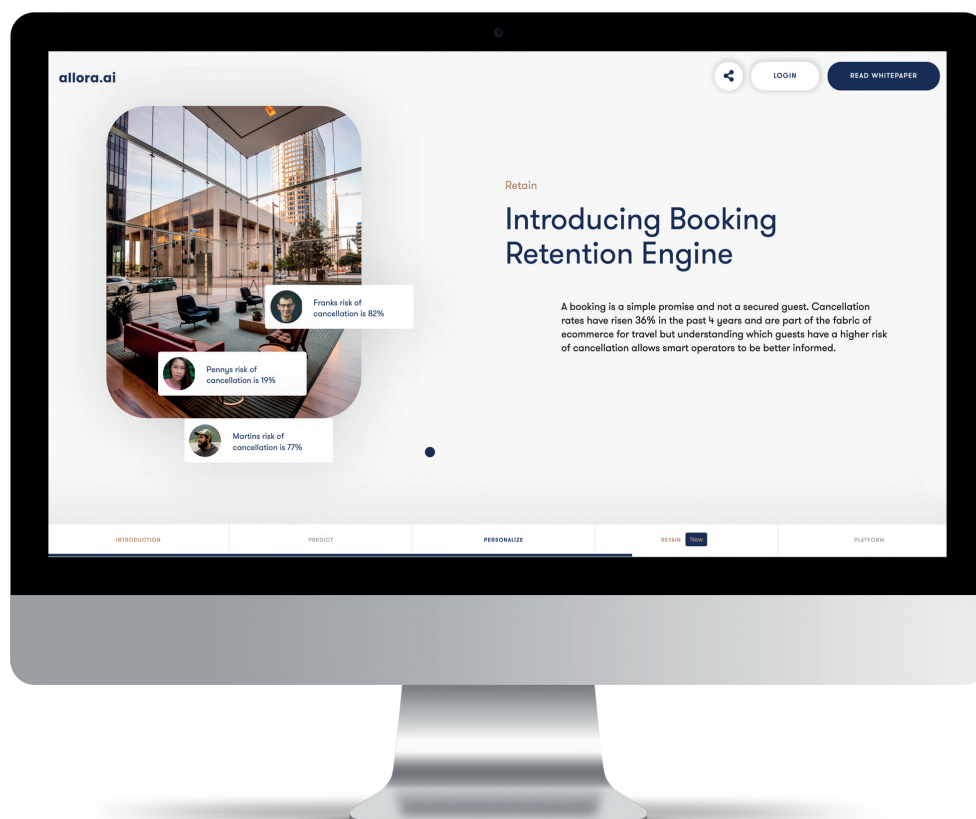
TAKEAWAYS

- You need a **booking retention strategy** to take control of your cancellations.

  - Start analyzing cancellation patterns - Who, When, How and Why.

  - Ensure you have the right tools that leverage A.I. and machine learning - these technologies can dramatically reduce the burden of effort needed to tackle the problem and improve accuracy.

- Start tracking your Net CPA in relation to digital marketing. Let this guide your targeting and post-booking messaging.

- Look at retention strategies as an opportunity to build your brand and overall engagement with your guests.

- Be as personal as possible and contextualize around the individual needs of the guest.

- Consider mitigation tactics that include pre-, during- and post-booking moments to maximize effectiveness.

The Science of Direct Guest Acquisition

#knowyourguest

PREDICT
PERSONALIZE
allora.ai
RETAIN

—— **"The travel landscape** ——

beyond COVID-19 will demand ever more booking

flexibility for hotel guests. This, combined with

an urgent and dynamic competitive market, and the

inevitable return of new and compelling OTA

value propositions, may trigger a cancellation

bloodbath well in excess of 20% on the direct channel

for hotels."

Frank Reeves, Co-founder & CEO, Avvio

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Jones, Rupert (2021): Risk of last-minute cancellation 'chaos' as UK holidaymakers hoard bookings. Consumers are booking stays at two or more hotels offering fully flexible cancellation, industry says. Edited by The Guardian. Available online at https://www.theguardian.com/travel/2021/ma-y/17/risk-of-last-minute-cancellation-chaos-as-uk-holidaymakers-hoard-bookings, updated on 5/17/2021, checked on 5/22/2021.

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5 - Kleweno, Phil; Rovati, Caterina; Venkataraman, Karthik; Beaudin, Laura (2019): Today's Traveler: Infinite Paths to Purchase. How customer-led travel brands master the complexity of the online booking journey. With assistance of Google. Bain & Company. Available online at https://www.-bain.com/globalassets/noindex/2019/bain_brief_todays_traveler_infinite_paths_to_purchase.pdf, checked on 5/14/2021.

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