Demystifying the Digital Marketplace: Spotlight on the Hospitality Industry

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WITH MATT CARRIER

A KALIBRI LABS SPECIAL REPORT

PUBLISHED BY THE HSMAI FOUNDATION
The sponsors and data providers were supportive in both study execution and provision of data but did not participate in the analysis and the findings do not necessarily reflect their opinions on the subjects conveyed in the study. The various data sources were synthesized and analyzed by the authors to develop the themes that are reflected in the book.
Dear Fellow Hotel Industry Stakeholders,

If we could choose one word to describe the current state of the hotel industry, that word would be dynamic. Not only is the industry benefiting from some really favorable tailwinds and consumer trends, but it is also energized by the multitude of opportunities for sustaining growth, generating new levels of customer loyalty and using digital innovation to improve the guest experience from the start of the booking process through guests’ stay and beyond.

It’s also a diverse industry, particularly when you look at the broader accommodation space we operate in. Hotels are by far the largest segment, with branded hotels continuing to generate the fastest revenue growth of all. But of course, it has always been a competitive industry, with a host of booking options, hotel types and lodging options and new business models entering the market.

At the Consumer Innovation Forum (CIF), an American Hotel & Lodging Association committee of which I am a member, we have been dedicated to providing research and education to the hospitality industry on matters relating to digital and distribution issues. Our main goal is to raise awareness of how the digital marketplace impacts the broader hotel industry.

To support the industry in addressing digital distribution evolution, Kalibri Labs has continued to track industry undercurrents to help reveal what hotel brands, owners and operators can do to embrace the changes and position the business for competitive success. The key to greater opportunities is market intelligence, which is why we are proud to present *Demystifying the Digital Marketplace*, a report that builds on the landmark 2012 study. Unprecedented in scope and scale, the rich insights and data provide a framework for understanding market realities as well as embracing opportunities to manage costs and optimize profit contribution.

We could not have reached this point without the support of a strong coalition of partners, including, first and foremost, the American Hotel & Lodging Association (AH&LA) and the American Hotel and Lodging Educational Foundation (AH&LEF), along with the HSMAI Foundation, the Asian American Hotel Owners Association (AAHOA), the Hospitality Asset Managers Association (HAMA), the Hospitality Financial and Technology Professionals (HFTP), and the IHG Owners Association.

The coalition of sponsors is broad and truly reflects a collaborative search for the insights, metrics and strategies to assist decision makers. We encourage our readers to use this research to help make more informed decisions in this dynamic marketplace.

Best Regards,

Andrew Rubinacci
Chair, Research and Education work stream
AH&LA’s Consumer Innovation Forum
SVP, Distribution & Revenue Management
InterContinental Hotels Group
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Traditional hotel performance evaluation using calculations of supply and demand has evolved with the digital marketplace into a new approach. The landscape of the digital marketplace is made up of many channels of distribution along with a variety of market segments and rate types. These new intricacies of digital distribution call for a deeper dive and broader understanding into what drives business.

A key factor impacting hotel performance in the new digital marketplace is the rising cost of customer acquisition. Growth in the digital distribution market for hotels has come along with the consolidation of several large intermediaries. Increasing market share of third-party intermediaries has caused distribution costs to rise quickly. These distribution costs, or customer acquisition costs, have risen from 5% - 10% of Guest-Paid Revenue in the 1990s to 15% - 25% in the U.S., or higher in other regions, in 2016. Customer acquisition cost is second only to labor costs in growth rate and is very difficult to manage. There are a myriad of vendors providing sales and technical services supporting hotel distribution with various fee and compensation structures that cause costs to be scattered across the Profit & Loss statement or not shown in accounting records. Even the most sophisticated operators struggle to quantify and manage customer acquisition costs in a routine way.

Navigating a virtual spaghetti bowl of players in the rapidly changing distribution ecosystem challenges those in the industry to understand the levers available to them that can affect improvement.

Part 2 of Demystifying the Digital Marketplace has taken hotel production data and associated costs for 25,000 hotels from 2014-2016, broken into 12 month periods ending in June of each year, to examine the patterns of performance by hotel type over time. Much of the analysis looks at three types of revenue or ADR: Guest-Paid Revenue or ADR includes everything paid to a hotel or third-party to account for Merchant (Net) rates; Hotel-Collected Revenue or ADR reflects the revenue the hotel collects and shows on the P&L statement; and COPE Revenue or ADR (Contribution to Operating Profit and Expense) which reflects the Guest-Paid Revenue after removing all direct acquisition costs such as commissions, transaction fees and channel costs. At the U.S. aggregate level, the study examines Net Revenue which additionally removes Sales and Marketing expense.

Part 3 will offer up methods for hotel brands, owners, and operators to analyze and act in the current market environment.

UPPER TIER = LUXURY, UPPER UPSCALE, UPSCALE
MIDDLE TIER = UPPER Midscale
LOWER TIER = Midscale and Economy
WHAT YOU NEED TO KNOW

There are five major themes that emerged from the review of data from June 2014 through June 2016.

Dynamic Hotel Demand and Cost of Customer Acquisition
Hotel demand is strong and revenue growth has been healthy. This theme is encouraging and reinforces the strength of industry fundamentals. More consumers are traveling and staying in hotels for business, leisure and meeting purposes. On the cost side, hotels continue to pay third parties to deliver more and more business each year. On average, hotels will pay 16-18% of guest-paid revenue in customer acquisition costs, but this ranges from about 15-25% with some hotels as high as 35-40%. The makeup of these costs is split roughly with half being internal direct Sales and Marketing expenditures and half spent externally. The third party payments generally run 7-15% of Guest-Paid Revenue with the costs incurred for internal Sales and Marketing costs making up the remaining 7-10%.

The Role of Third Party Intermediaries
The traction in the market by third party intermediaries is becoming more pronounced over time. Within the OTA segment, two companies and their affiliates represent about 96% of consumer demand on a room night basis. The OTA share of total room nights is up 28% from 2014-2016 to an average of 12.4% of demand while Brand.com grew 9% to reach an average of 20%. As a relatively small number of aggregators attract a growing portion of consumer demand, it drives higher total costs for those who want to tap into the demand flow, even as commission fee percentages come down. Metasearch is gaining share in the third party intermediary space and while it is often charged through auction models and media fees rather than commissions, these costs are rising quickly. In fact, meta search players are adding to the overall market costs pitting the OTAs against brands and individual hotels for position in search results. Hotels, being downstream of the aggregated demand, are experiencing a decline in the amount they can capture of Guest-Paid Revenue growth. That differential varies by hotel segment with some able to capture more of the value in the market than others. Across all U.S. hotels in the timeframe of the study, Guest-paid Revenue grew 4.6% while Net Revenue* only grew 4%. Even in a period of robust economic growth, this gap has widened over time as third parties are sharing in a higher proportion of the incremental value coming into the market.

*Net Revenue accounts for commissions, transaction and channel costs as well as total Sales and Marketing expenses.

The Imperative to Manage Revenue Capture
Revenue Capture is the percentage a hotel keeps of Guest-Paid Revenue once all acquisition costs are paid. Managing Revenue Capture is an imperative to sustain profitability in the digital marketplace. The 2014-2016 data trends examined in this analysis bring into sharp focus the fact that a traditional top line view of revenue performance has masked a weakness in true hotel profitability driven by unrelenting growth of acquisition costs. In the period from 2014-2016, OTA commissions rose at three times the rate of growth of Guest-Paid Revenue. Metasearch costs are still small in absolute terms but are a growing component of customer acquisition. When a rising tide of Guest-Paid Revenue does not result in a corresponding rise in profit contribution to hotels, owners and operators are constrained in their ability to reinvest in property improvements and staffing.

Diversity of Business Mix and Impact on Profit Contribution
There remains a wide range of channels and segments through which hotels receive their business, and this diversity is important for hotels to leverage as they deploy resources to acquire their customers. There have been shifts in this mix of channels and segments that have had direct implications for profit contribution. The most notable is the transfer of bookings from Property Direct (drive-in, call-in), to the OTA channel. That change is particularly evident in the Middle and Lower Tier hotels, or Upper Midscale, Midscale and Economy chain scales, causing a reduction in Revenue Capture. On the other hand, Upper Tier hotels, or Luxury, Upper Upscale and Upscale chain scales, managed to shift within the OTA channel to improve profit contribution by dramatic reductions in Opaque OTA business while growing the Brand.com business yielding higher Revenue Capture.

Managing this diverse mix is at the root of what hotels can do to improve their profit contribution. Each hotel has a wide range of channels and segments available in its market and can tap this to get a healthy balance of business at the lowest cost possible. This target, based on each hotel’s market situation is referred to as the hotel’s unique Optimal Business Mix and achieving that objective will be explored in detail in Part III of Demystifying the Digital Marketplace.
Customer Acquisition Techniques—Loyalty, Leisure and Profit Contribution
As the U.S. market is dominated by chain hotel companies, their brand loyalty programs seem to be at the heart of many acquisition strategies. Results from the recent wave of campaigns by most chains have proven that consumer behavior can be influenced by these member programs. For the first time in five years, Brand.com grew more quickly than OTAs corresponding with the introduction of Book Direct/Member Rate campaigns to the market. Additionally, the proportion of room nights booked by loyalty members is at an all-time high, well beyond the traditional strength in the business travel segment. In 2016, the incentive offered to prospective members was discounted rates which may have limited the profit contribution for the hotels in the short term with the longer term objective of engaging them as recurring customers. Incentives to book on Brand.com that do not incur direct costs would prove even more beneficial to hotels. Overall, Brand.com delivers higher Net ADRs for the hotels when compared to the Net ADRs they would receive through any other channel.

Acquiring guests through OTAs appears to be most effective during typical leisure periods. However, no hotel can expect to receive all their business through any one channel and learning optimization techniques to attract consumers through a mix of low-cost channels will always be the best path to higher profit contribution.

HIGHLIGHTS
- Revenue Capture, or the percentage of revenue hotels retain after all customer acquisition costs are paid, has declined from 84.4% in the 12 months ended June 2015 to 83.9% in the same period 2016. This represents $729 million that U.S. hotels could have retained and put towards operating expenses and improvements.
- The average range for customer acquisition costs is between 16%-18% of Guest Paid Revenue but many hotels still pay over 25%.
- Brand.com is approximately 20% of room night demand in the year ending June 2016. This compares to OTA at 12.4%, GDS at 9.5% and Voice at 8.1%. Group is 14.2% and Property Direct is 34.3%.
- Brand.com has a COPE ADR that is 27% higher than the OTA COPE ADR even when the costs of loyalty programs as well as discounts related to corporate and other negotiated rates are included.
- The OTA commissions paid by the U.S. industry have grown from 2014-2016 at three times the growth rate of Guest-Paid Revenue. Retail Commissions paid to non-OTA travel agents are growing at a similar rate to Guest-Paid Revenue.
- The proportion of business delivered by loyalty members has increased in all hotel types over the past three years. The Upper and Middle Tier hotels generate over 50% of their business from loyalty members and those figures have grown from 2014 to 2016 by 6.5% and 7.4% respectively. Lower Tier hotels have roughly 25% loyalty penetration in their business but grew that figure 17% from 2014 to 2016.
OVERALL INDUSTRY VIEW—SUMMARY OF FINDINGS

- Hotel-Collected ADR (or traditional ADR) growth during the current cycle, beginning in 2009, has been surprisingly low. ADR growth has been well below prior cycle peaks despite the strongest supply/demand relationship and the highest industry occupancies of the past 40 years.

- COPE Revenue is not growing as quickly as Guest-Paid Revenue or Hotel-Collected Revenue. Meaning that as consumer demand increases and as guests pay more, hotels are not always capturing that incremental value due to added customer acquisition costs. If hotels benefited proportionally from increases in revenue paid by guests then the growth in COPE Revenue would equal the growth in Guest-Paid Revenue.

- If COPE Revenue had only grown at the same rate as Guest Paid Revenue (4.6%) from 2015 to 2016 the industry would have retained approximately $440 million in incremental profit contribution. Over many years this “sieve effect” may undermine the hotels’ ability to control the levers of customer acquisition.

- Industrywide, Revenue Capture, or the percentage of Guest-Paid Revenue that hotels retain after all customer acquisition costs are paid including Sales and Marketing expense, declined 0.5% from 2015 to 2016. If the Revenue Capture percentage had remained steady year over year, hotels would have retained $729 million more.

This reflects in a $9 billion erosion of asset values (using an 8% capitalization rate). For every tenth of a point that Revenue Capture percentage declines, asset values are reduced by $1.8 billion.

- Bookings through the OTA, GDS and FIT/Wholesale channels (Indirect Sources of Business), are an increasing percentage of total transient bookings. The Transient Direct-to-Indirect Ratio measures the number of Direct Bookings, defined as bookings through Brand.com, Voice or Property Direct Sources of Business, for every one Indirect Booking. This ratio has declined from 4.3 in 2011 to 2.7 in 2016 meaning that in 2016 there were only 2.7 Direct Bookings for each Indirect Booking. This decline in Direct Bookings reflects the increasing market share of third-party intermediaries.

- Digital channels now account for 42% of total room nights. Growth in Brand.com, OTA and GDS comes at the expense of more traditional Sources of Business such as Property Direct and Voice.

- The difference between Guest-Paid and Hotel-Collected Revenue has grown to over $3.5 billion in the 12 months ending in June 2016. This difference is made up of Merchant (Net), Opaque and Wholesale commissions. Currently reported Hotel-Collected ADR numbers at the total U.S. level are understated by about $3 dollars and do not reflect actual customer spend as they do not account for rates paid directly to third parties.

4 DEMYSTIFYING THE DIGITAL MARKETPLACE
The Brand.com room night share of the total U.S. market for the year ended June 2016 was 20.0% while OTA was 12.4%; GDS was 9.5%; Voice 8.1%; Group 14.2%; FIT 1.4%; and Property Direct was 34.3%.

While OTA room night growth was most dramatic over the period of 2014 to 2016 at 28%, it was on a much smaller base than Brand.com which rose 9% while GDS gained 6.5%. Property Direct’s decline was the largest at 12.8%. Modest changes were in Group with a 0.2% gain and FIT Wholesale with a 0.9% decline.

The OTA business is dominated by Expedia and Priceline/Booking.com with those two parent companies comprising roughly 96% of the OTA business in the U.S. The mix of business models within the OTA channel has shifted dramatically from 2014 to 2016. Opaque business has declined by almost 10% while the Retail models of Expedia Traveler Preference and Booking.com had the most significant increase of 108% and the Merchant (Net) model rising by 23.7%.

Costs

- Bookings made directly with the property or brand are more profitable than those made with an intermediary. Indirect bookings contain commissions in addition to channel fees and are likely to be discounted rates. As a percentage of Guest-Paid Revenue, OTA costs are approximately 2.5 times those of Brand.com.
- OTA commissions, other retail commissions, and loyalty fees are outpacing the growth rate of Guest-Paid Revenue. OTA commissions are growing at nearly 3 times the rate of Guest-Paid Revenue and 2 times the rate of loyalty fees. All customer acquisition costs have increased over the 2014-2016 period.
- As Indirect demand rises, there will be a negative and disproportionate impact on COPE Revenue due to the significantly higher costs associated with Indirect business.

Loyalty

Third party intermediary marketing budgets dwarf those of hotel brands with Expedia and Priceline reported as spending $6 billion in Google search alone. However, the penetration of hotel brand loyalty programs clearly convey a powerful value proposition to consumers. Hotel brands have a strong hold on certain segments of the market, such as business travel and government due to loyalty programs while OTAs dominate amongst non-loyal consumers buying leisure products.

The share of room nights associated with loyalty member bookings was over 50% for the Upper and Middle Tiers and about half that for the Lower Tier. The Tiers, discussed further below, break U.S. hotels into groupings based on their rate performance and business profiles. Growth rates for Brand.com loyalty penetration from 2014 to 2016 are strong within the Upper Upscale chain scale at 8.5%, followed by the Midscale and Upper Midscale chain scales at 7.6% and 7.4% respectively. The Economy chain scale had the strongest loyalty penetration growth, 32.6%, but was building on a smaller base at roughly half of the loyalty penetration of other chain scales.

HIGHLIGHTS BY TIER

This study examines three tiers of hotels grouped based on having similarity in their rate performance and business profiles. The Upper Tier contains the Luxury, Upper Upscale and Upscale chain scales, the Middle Tier contains the Upper Midscale chain scale and the Lower Tier contains the Midscale and Economy chain scale hotels.

The Direct-to-Indirect Ratio decline was more severe in the Middle and Lower Tier hotels largely due to the rapidly shrinking Property Direct Source of Business. Much of that business shifting away from Property Direct appears to be powering the OTA growth in those chain scales. The Upper Tier had a much smaller decline in its Direct-to-Indirect Ratio due to a smaller uptick in OTA business combined with a larger increase in Brand.com room night share.

Upper Tier

(Luxury, Upper Upscale and Upscale chain scales)

- From 2014 to 2016, Upper Tier properties managed costs better than those in the Middle and Lower Tiers with COPE ADR growth of 7.1%, which is only slightly less than Guest-Paid ADR growth of 7.4%. Growth was accomplished largely through a shift in the OTA channel from Opaque to Merchant and Retail along with a healthy increase in Brand.com.
- The COPE ADR for Brand.com is 11% higher than the COPE ADR for the OTA channel. The OTA COPE ADR improved almost 10% from 2014 to 2016 largely driven by a reduction in Opaque rates and improvement in the Merchant (Net) model rates; Brand.com rates improved 6.2% for the same period.
- In absolute terms, OTA and GDS COPE ADRs have performed relatively similarly over the past two years although OTA business is concentrated on the weekends while GDS business typically comes mid-week.
- Opaque OTA demand share dropped from 2014 to 2016 in the Upper Tier more sharply than the overall U.S. market, -24.7% compared to -9.6%. OTA Retail model
business, at 48.4% of OTA demand, grew at roughly half the rate of the U.S. as a whole. The Merchant (Net) model gained about 15.8% compared to the national average of 23.7%.

- In a close second to OTA room night share growth from 2014 to 2016 of 13.9%, Brand.com grew by a full 11.1% and on a much larger base with more than twice the beginning share compared to OTA.

- Within the Upper Tier, the Luxury chain scale shifted business to the OTA channel in a more pronounced way than the Upper Upscale and Upscale chain scales. For Luxury, the OTA Source of Business grew 2.3 points in room night share from 2014-2016 while Upper Upscale and Upscale grew only 1 and 1.4 points respectively.

- Although all chain scales in the Upper Tier had increases in their COPE ADR from 2014 to 2016, the growth was slowest for Luxury at 5.8% compared to 7.7% for Upper Upscale and 8.9% for Upscale.

- The COPE ADR for the Luxury chain scale was negatively impacted by a combination of a high proportion of OTA business, the room night share of which continues to grow, along with the costs associated with luxury consortia amenities, a cost category that mostly pertains to the Luxury chain scale.

Middle Tier
(Upper Midscale chain scale)

- COPE ADR growth was hampered compared to Guest-Paid ADR growth largely due to a shift from Property Direct to the OTA channel.

- Middle Tier COPE RevPAR growth of 3.2% from the 12 months ending in June 2015 compared to the same period in 2016 was stronger than that of the Upper Tier at 2.1% and of the Lower Tier at 3.1%. Growth can be partially attributed to increases in the COPE ADR of the Voice channel at 7.0% and of Brand.com at 6.7%. A limited growth in supply for the Middle Tier was also a contributor to improved occupancy, in turn driving stronger COPE RevPAR performance.

- Within the OTA Source of Business, the Middle Tier Opaque room night share declined by 17%, almost twice the industry-wide Opaque room night share drop, while the Opaque COPE ADR improved by over 12%. The Retail model COPE ADR declined by 0.5% and the Merchant (Net) model improved its COPE ADR by 7%. These shifts contributed favorably to the Middle Tier’s COPE RevPAR performance.

Lower Tier
(Midscale and Economy chain scales)

- The Lower Tier had a similar but more dramatic shift than the Middle Tier from Property Direct to OTA bookings. This played out as a wide gap between the Guest-Paid Revenue growth and the COPE Revenue growth from 2014 to 2016. The decline in Property Direct room night share coupled with an increase in OTA and flat growth in Brand.com led to reduced ability to capture the value of increased Guest-Paid Revenue.

- The Midscale chain scale showed the strongest COPE RevPAR growth at 3.6%, from the 12 months ending June 2015 to the same period in 2016, of any chain scale in this analysis. The hotels in that chain scale grew COPE Revenue more efficiently than any other chain scale and managed to keep their acquisition costs more in line with rate improvement.

- The Economy chain scale, while it had the best improvement in Guest-Paid Revenue of all chain scales from 2014 to 2016, leads the industry in OTA growth at 44% over that same period. Additionally, it was the only chain scale that experienced share growth within the Opaque OTA model at 6.6% from 2014 to 2016; the industry as a whole showed a decline of 10%.

- In 2016, the Lower Tier had a premium of over 10% for Brand.com COPE ADR compared to OTA COPE ADR. This premium declined from the previous year’s figure of closer to 15%. The GDS COPE ADR for the Lower Tier is 16% higher than that of the OTA COPE ADR, whereas for the Upper and Middle Tier hotels the GDS and OTA COPE ADRs are much more similar.

The following section will delve into the overall U.S. market performance in more detail as well as explore the specific performance of each of the Tiers described above.
Understanding U.S. Lodging Performance

This section of the report will review the current performance of the lodging industry, running through the first half of 2016. Particular emphasis will be placed on analyzing the changes in the traditional key performance indicators of supply, demand, occupancy, ADR and RevPAR since the publication of the *Distribution Channel Analysis: a Guide for Hotels* in 2012. In addition, new critical metrics of COPE ADR and COPE RevPAR will be introduced. These new metrics measure net ADR and net RevPAR calculated by deducting the direct cost of customer acquisition from the traditional top line revenue key performance indicators. They are quickly becoming universal as they are deployed in many U.S. hotel companies.

A discussion of current U.S. lodging industry performance starts with the fact that each of the key performance indicators achieved record highs during months in 2016. Specifically, the industry experienced the highest number of rooms available, the most rooms sold in any year, the highest occupancy levels, the highest average daily room rate and the highest room revenue per available room. In addition, the industry generated the most room revenue in its history. Please see Exhibit 1 for details.

### Exhibit 1
Industry Performance
U.S. Total

<table>
<thead>
<tr>
<th></th>
<th>12 Months Ending June 2016</th>
<th>% Change from Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room Supply *</td>
<td>4,961,000</td>
<td>+ 1.5%</td>
</tr>
<tr>
<td>Room Demand *</td>
<td>3,225,000</td>
<td>+ 1.3%</td>
</tr>
<tr>
<td>Occupancy</td>
<td>66.9%</td>
<td>- 0.2%</td>
</tr>
<tr>
<td>Average Daily Rate</td>
<td>$124</td>
<td>+ 3.1%</td>
</tr>
<tr>
<td>RevPAR *</td>
<td>$83</td>
<td>+ 2.9%</td>
</tr>
<tr>
<td>Room Revenue *</td>
<td>$150 B</td>
<td>+ 4.5%</td>
</tr>
</tbody>
</table>

* All time high

June 2016 STR
SUPPLY
Over the past 5 years, supply growth in the U.S. lodging industry has been stagnant, averaging just about 1 percent. With a room supply base of approximately 5 million, this means that the industry, on average, added less than 50,000 net new hotel rooms each year. While the number of net rooms added has been climbing slowly every year since 2011, this level of activity remained well below the 30-year average of about 2 percent supply growth per year. Historically, room supply growth is rarely in synch with the economic cycle. Because economic cycles don’t last forever, money is traditionally available for development during good economic times and less available during an economic downturn. Economy cycles often result in surges in new hotel development during the midpoint or later stages of a strong economic environment and, conversely, less development in the early stages of a recovery. As hotel development typically takes several years to complete and rarely stops once the project is under construction, it is not unusual for an increase in room supply to continue in a down economic cycle. As Exhibit 2 shows, this is exactly what happened during the recession of 2008/2009. What followed was a natural decline in the availability of capital to build hotels resulting in very low levels of supply growth. What makes the current situation unusual is that, historically, at this stage in an economic recovery, supply growth has typically accelerated much faster than it has in this cycle..

In 2016 the U.S. lodging industry experienced a surge in the hotel development pipeline, but it has not been enough to have a dramatic effect on hotel performance in the short term. In other words, absent a significant decline in lodging demand, any drop in industry occupancy over the next several years will almost certainly be the result of deteriorating economic conditions and not an oversupply of hotel rooms. Exhibit 3 highlights the current hotel development pipeline.

As not all hotel projects in the planning and final planning stages are actually built and considering the time it takes to get hotels up and operating, the numbers shown on Exhibit 3 are not especially alarming. One factor to consider is that almost 70% of hotel rooms currently under construction are in the Upscale and Upper Midscale chain scale segments of the industry. This has been the case for several years now and seems unlikely to change in the short term. Exhibit 4 presents the current number of rooms currently under construction in each of the primary Chain Scale segments.

Exhibit 2
Supply and Demand
U.S. Total

Room Supply and Room Night Demand
% Change in 12-month moving average

Supply % Change
Demand % Change

1989-2016 STR
Exhibit 3
Development Pipeline
U.S. Total

<table>
<thead>
<tr>
<th>Room Supply YTD June 2016</th>
<th>% Change from Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Construction</td>
<td>170,000</td>
</tr>
<tr>
<td>Final Planning</td>
<td>198,000</td>
</tr>
<tr>
<td>Planning</td>
<td>174,000</td>
</tr>
<tr>
<td>Under Contract</td>
<td>542,000</td>
</tr>
</tbody>
</table>

June 2016 STR

Exhibit 4
Construction Pipeline
Total U.S.

<table>
<thead>
<tr>
<th>Chain Scales</th>
<th>Room Supply (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxury</td>
<td>6.1</td>
</tr>
<tr>
<td>Upper Upscale</td>
<td>20.0</td>
</tr>
<tr>
<td>Upscale</td>
<td>68.5</td>
</tr>
<tr>
<td>Upper Midscale</td>
<td>65.1</td>
</tr>
<tr>
<td>Midscale</td>
<td>6.9</td>
</tr>
<tr>
<td>Economy</td>
<td>1.5</td>
</tr>
<tr>
<td>Unaffiliated</td>
<td>22.1</td>
</tr>
</tbody>
</table>

June 2016 STR
Another factor to consider when discussing net new room supply growth in the U.S. hotel industry is that the net new number of rooms is the combination of new rooms added, minus existing rooms that have closed. While the “net” room additions to the industry reflect sizable fluctuations, it is often rooms that are removed from inventory that dictate overall net supply growth.

Exhibit 5 shows the room segmentation by chain scale for the U.S. hotel industry in 2016. As shown, most rooms are in the middle to lower price segments of the industry with significantly fewer in the Luxury and Upper Upscale categories. As noted earlier, the composition of the industry is unlikely to be altered in the coming years.

When evaluating hotel industry room supply in the current environment it is necessary to address the effect the sharing economy is having on the availability of overnight accommodations. Companies like Airbnb and HomeAway have greatly increased their number of offerings available to consumers in recent years. Many of the major U.S. markets now have a significant number of “hotel competitive” rooms for rent. This trend is likely to continue in the coming years and to accelerate in any economic downturn.

One interesting aspect of the Airbnb phenomenon is that the makeup and business model of Airbnb is the first unique structural change the industry has seen since the 1950’s. While there have been innovative lodging products and services created over the years, nothing has lived outside the traditional owner/brand/franchisee world the way that the shared economy does. In today’s digital and social world, the fragmented nature of the hotel industry will need to evolve to ensure it operates in the most efficient manner. Airbnb and the other sharing economy disruptors are discussed in more detail in Part 1 of Demystifying the Digital Marketplace and in the Airbnb sidebar in Part 2 on page 11.
**AIRBNB**

The impact of Airbnb on hotel performance is a topic of considerable interest within the hospitality industry. Kalibri Labs has done preliminary examinations on Airbnb supply and demand data in several high-profile markets. The analysis below will focus on findings from the Manhattan, NYC market.

While Exhibits A and B are inclusive of all hotels and all Airbnb listings, in Exhibits C-E, the hotel bookings and Airbnb bookings were limited to profiles that were considered by Kalibri Labs to be comparable to one another. Essentially, this analysis focuses on hotels in the Upper Midscale, Upscale, Upper Upscale and Luxury chain scales and transient bookings as opposed to group. The Airbnb bookings included are listings for an entire home or apartment, with four or fewer bedrooms and with a minimum stay of less than four days. This analysis focuses on the full calendar year of 2015.

The goal is to come as close as possible to comparable hotel room and Airbnb listings. There will be additional views of this analysis in the coming months that will potentially include corporate and to look at the different behavior in a variety of markets.

Given the above constraints, the Guest-Paid ADR, which includes cleaning fees and the service charges incurred by Airbnb guests on top of the rate, for Airbnb in Manhattan is concentrated in a generally lower range than that of the comparable hotel bookings examined. This is laid out as a distribution in Exhibit A. 70% of Manhattan Airbnb listings have an average Guest-Paid ADR of between $50 and $175 whereas 54% of hotels in that same set have an average Guest-Paid ADR of between $150 and $300.

---

**Exhibit A**

**Guest-Paid ADR 2015**

- **Airbnb Listings vs. Hotels Manhattan**

  - **54% of Hotels have an average Guest-Paid ADR** of $150-300
  - **70% of Airbnb listings have an average Guest-Paid ADR** of $50-175

---

*Guest-paid ADR includes cleaning fees and the Airbnb service charge incurred by the guest.*

*Guest-paid ADR includes all opaque, merchant and wholesaler or other pre-pay commissions at hotels.*

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Additionally, the Airbnb listings typically have a longer length of stay compared to hotels in the analysis. Roughly three quarters of Manhattan Airbnb listings have an average length of stay of three nights or more. This is in contrast with the comparable hotels where 82% have an average length of stay of three nights or less. This is shown as a distribution in Exhibit B.

Taken together, the typically lower Guest-Paid ADR and longer length of stay would indicate a larger potential impact on lower-rated extended stay brands compared to other segments of the hotel industry, at least within this particular market and time period.

Another contrast with comparable hotels emerges when the demand share for comparable Airbnb and hotels are broken out by day of week. This is shown in Exhibit C. While the hotel demand is relatively evenly spread by day of week, the Airbnb demand is skewed heavily to the weekend days with nearly half of the Airbnb demand coming Thursday through Saturday nights. This indicates a much heavier weight of leisure transient business for Airbnb compared to the hotels in Manhattan.

Despite this uneven distribution of demand over day of week, it doesn’t appear that there is yet a real pricing pattern based on the day of week for Airbnb, meaning that the Guest-Paid ADR does not shift up or down based on the day of the week. This stands in stark contrast to the pattern seen with the comparable hotel bookings. This is illustrated in Exhibit D.
Exhibit C
Demand by Day of Week
2015

Airbnb Listings vs. Hotels Manhattan

Hotel demand share is more evenly distributed, focused on Weekdays

Almost half of Airbnb demand is Thursday-Saturday nights

Exhibit D
ADR by Day of Week
2015

Airbnb Listings vs. Hotels Manhattan

*Guest-paid ADR includes cleaning fees and the Airbnb service charge incurred by the guest
*Guest-paid ADR includes all opaque, merchant and wholesaler or other pre-pay commissions at hotels

Airbnb data includes only ‘Hotel comparable’ listings; Hotel data excludes Group, Contract and Wholesale rates
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The difference in booking lead time is another contrast in the behavior of Airbnb listings compared to hotel bookings. Exhibit E highlights the booking curves for Airbnb bookings as well as comparable hotel bookings. While 50% of hotel bookings are made in a two-week window prior to arrival, the same proportion of Airbnb bookings are made within a five-week window. Airbnb bookers are planning and booking their stays further out than comparable hotel bookers.

Based on this initial analysis of the Manhattan Airbnb market, it appears that hotels that operate in a lower ADR range and have product or rate types attracting longer lengths of stay will be most similar to the profile of Airbnb users. The timeframes that are most likely to have this home rental supply introduced into the market are the periods when leisure guests travel including weekends and during large-scale consumer-oriented events like sporting, cultural or those of specialty interest. In order to do a more granular analysis of impact, a hotel has to isolate those periods and hotel types to compare supply, demand and revenue performance with and without Airbnb supply and demand rather than dilute these metrics by aggregating all periods and all hotels.

Exhibit E
Booking Patterns 2015

Airbnb Listings vs. Hotels Manhattan

50% of Airbnb bookings made in the last five weeks prior to arrival
50% of Hotel bookings made in the last two weeks prior to arrival

Airbnb data includes only ‘Hotel comparable’ listings; Hotel data excludes Group, Contract and Wholesaler rates 2016 Kalibri Labs
DEMAND

Following the dramatic declines in demand that resulted from the recession that began in 2008, lodging demand has made a very impressive rebound. As shown in Exhibit 6, lodging demand reached record levels in 2016. In fact, the growth in the number of rooms being sold has been so dramatic that beginning in June of 2011 and continuing through the first half of 2016 the U.S. hotel industry continues to sell more rooms on an annualized basis than it has at any point in its history. Exhibit 6 shows annualized industry demand figures that prove this trend. This surge in demand for rooms was fueled by many factors including, but not limited to, increases in group business as well as growth in both transient leisure and business travelers. While the rate of demand growth has slowed considerably throughout 2016, growth remains positive.

A major factor that also contributed to demand growth was the nature of the U.S. economic recovery from the 2008 recession. While the recovery in several sectors, specifically manufacturing and construction, has remained weak, especially in the early stages of the recovery, those industries that tend to generate lodging demand have recovered and been quite healthy. Specifically, the health of the financial sector as well as the increasing economic orientation toward a service based economy have all been very beneficial to the lodging industry. In addition, while unemployment had remained stubbornly high early in the recovery, the unemployment rate for college educated adults was well below what was experienced by non-college educated adults, and was at historically low levels. This is important for the lodging industry as high college educated employment numbers are a healthy indicator of lodging demand.

Throughout this long growth cycle lodging demand has been surprisingly broad based as most segments have benefited from this healthy demand growth period. There have certainly been pockets of both lackluster and extremely strong demand increases, but whether looking at either chain scales, regions, class or big vs. small markets, most changes in demand have generally been positive.

DETERMINING REVENUE CAPTURE – CUSTOMER ACQUISITION COSTS

With customer acquisition costs emerging as the fastest rising cost in hotels, and second only to labor costs at 15-25% of Guest-Paid revenue, one of the overriding
objectives of *Demystifying the Digital Marketplace* is to accurately document these costs for hotels. To effectively do that, it is vital to identify both the costs associated directly with the transaction (commissions, channel fees and loyalty costs) as well as those costs associated with attracting the guest to the property that is broader in scope and not directly triggered by a transaction or tied to a specific channel (e.g. Sales and Marketing costs). The customer acquisition costs referenced in *Demystifying the Digital Marketplace* will be straightforward in terms of direct transaction and commission costs. However, Sales and Marketing costs vary dramatically between properties based on allocations and other management or franchise agreements. In order to apply costs across the entire industry, a sample of hotels from the Kalibri Labs database was compared to CBRE’s “Trends in the Hotel Industry USA Edition 2016.” After reviewing multiple data points, the Sales and Marketing cost average of just under 8% of Hotel-Collected Revenue in both 2015 and 2014 was applied in this study.

Using that data in conjunction with the Kalibri Labs database, Net Revenue, the amount of revenue remaining after both transaction costs as well as Sales and Marketing costs are removed, was calculated. Revenue Capture is shown as the percentage of Net Revenue divided by Guest-Paid Revenue. Exhibit 7 presents both of those numbers for all U.S. hotels for the 12 months ending in June 2016 and 2015.

As shown in Exhibit 7, guests paid nearly $147 billion in the 12 months ending in June of 2016 to purchase hotel rooms. However, of that amount, $23.6 billion was paid by the industry in total customer acquisition costs, which include direct transactional costs as well as Sales and Marketing costs. Within that total customer acquisition cost figure, $3.5 billion was never reflected on the hotels’ P&L statements because it was traditional wholesale-sourced or sold in the OTA Merchant (Net) rate or OTA Opaque model.

With wholesale or Merchant (Net) bookings the intermediary who books the reservation subtracts their commission before remitting a net rate back to the hotel. By recording less than the true Guest-Paid ADR, hotels are unable to record accurate room revenue and accurate ADR figures and are artificially understating what guests are actually paying for hotel stays. In fact, when examining revenue net of customer acquisition costs, year over year growth has not been as strong as the amount reflected in the traditional P&L, or Hotel-Collected revenue. Exhibit 8 highlights room revenue growth by revenue classification.
Understanding U.S. Lodging Performance

DATE RANGES IN THE ANALYSIS
The Kalibri Labs database contains cost of sales, booking and check-out history for over 25,000 hotels across the industry in the United States and is the basis for this analysis. The Kalibri Labs data is based on trailing 12 month years defined as July through June. For example, ‘2016’ data reflects the 12 months encompassing July of 2015 through June of 2016. The goal of the analysis is to show the industry’s evolution over the previous full three years, and many of these figures will be updated to reflect full calendar year trend performance based on year end 2016 data in Q1 2017.

As shown in Exhibit 8, Guest-Paid Revenue grew by 4.6% in the twelve months ending in June of 2016. However, adding in both components of total customer acquisition costs, direct costs such as commissions and transaction fees as well as indirect Sales and Marketing costs, revealed the true growth to be only 4.0% over the same period based on revenue net of total customer acquisition costs.

These acquisition costs related to each transaction fall into three major categories, which are broken out in Exhibit 9. These are: commission, channel and loyalty costs that are reflected on the P&L statement; commission costs that are not reflected on the P&L statement; and Sales and Marketing expenses.

As seen in Exhibit 9, the hotel industry spent more in each of the three categories in 2016 than in the 12 months previous. In total, that amounted to an increase in spend of over $1.7 billion in one year. Increased hotel demand along with a heavier reliance on third party intermediaries drove this shift.

It is clear that the cost of customer acquisition in today’s lodging environment continues to grow, both in absolute numbers and as a percentage of Guest-Paid Room Revenue. An often overlooked component of
Exhibit 9
Cost of Sales
Total U.S.

Cost Amount (billions)

- 2015
- 2016

Non-P&L Transaction Costs: $3.2 B in 2015, $3.5 B in 2016
P&L Transaction Costs: $8.1 B in 2015, $8.8 B in 2016
Sales and Marketing Cost: $10.6 B in 2015, $11.3 B in 2016

12 months ending in June 2015 and 2016
2016 Kalibri Labs

Exhibit 10
Revenue Capture
U.S. Total

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Revenue</th>
<th>Revenue Capture %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$123,256,000,000</td>
<td>83.9%</td>
</tr>
<tr>
<td>2015</td>
<td>$118,501,000,000</td>
<td>84.4%</td>
</tr>
<tr>
<td>Change</td>
<td>+ 4.0%</td>
<td>- 0.5%</td>
</tr>
</tbody>
</table>

12 months ending in June 2015 and 2016
2016 Kalibri Labs
this trend is the impact on hotel asset values. Referring to Revenue Capture Exhibit 10, the hotel industry has seen a 0.5% decline in Revenue Capture year over year. In dollar figures, that means that if the U.S. hotel industry had performed the same in the 12 months ended June 2016 as it had in the previous 12 months, the industry would have retained an additional $729 million toward the bottom line over that period. In order to ascertain the change in asset valuation, applying an 8% capitalization rate to that potential profit means that industry-wide asset values were eroded by approximately $9 billion as a result of reduction in net cash flow. Another way to say it is that for every tenth of a point in Revenue Capture loss the industry’s asset values decline by $1.8 billion.

Managing a hotel’s Revenue Capture is imperative for operating effectively in the digital marketplace. While the average across the U.S. hotel industry for the period of this study is a customer acquisition cost of approximately 17% of Guest-Paid Revenue, the range for most hotels falls between 15-25%. This puts the U.S. Revenue Capture average between 75%-85% with most between 80-85%, however, many hotels experience a considerably lower Revenue Capture performance than the industry average.

CHANGING CONSUMER HOTEL PURCHASING PATTERNS – COST IMPLICATIONS

With the advent and acceleration of the digital age, consumers continue to adjust their behavior across all industries including approaching hotel booking differently. Whereas in the past most guests tended to book their reservations directly with the hotel by calling or physically going to the property, consumers are now much more likely to shop for and buy their rooms online and/or on a mobile device. Almost half of all bookings were through electronic channels in 2016 and a much higher percentage of consumers tap digital channels for at least one part of the shopping journey. For a hotelier, this shifting consumer behavior from one booking channel to another can have a dramatic effect on the property’s bottom line as each booking channel comes with its own associated costs. Understanding the impact of shifting channels is key to managing a hotel’s cost of customer acquisition. It is important to recognize that hotels may incur costs from both consummated transactions as well as from maintaining a presence in some channels.
Kalibri Labs booking channel data is defined with more detail than is typically seen in hotel industry reporting. Due to the granularity at which the data is collected, bookings are assigned into Sources of Business that accurately reflect the nature of the booking.

In addition to the standard channels of Brand.com, Voice, Property Direct, GDS and OTA, Kalibri Labs separates FIT Wholesale and Group bookings. Any wholesaler booking or group booking made through a standard channel (i.e. Property Direct or Brand.com through Passkey) will be split out and categorized as FIT Wholesale and Group respectively. This categorization allows for more accuracy and specificity when analyzing industry distribution trends, and controls for variations across hotel companies in the channel-reporting for Group and FIT Wholesale bookings.

Highly discounted rates such as friends and family, employee, owner rates or comp rooms will fall into the Source of Business through which they were transacted.
Exhibit 11 shows the Total U.S. room night demand share for July 2015 through June of 2016. For the industry as a whole, direct booking channels are dominant, led by the huge amount of business that still comes direct to the property. This is predominantly driven by chain scales at the lower end of the ADR range in the industry, and will be examined in more detail later in this analysis.

Exhibit 12 illustrates how transient hotel booking patterns in the U.S. have changed over the past 3 years, shifting much more toward indirect bookings. Since 2014 the ratio of direct bookings to hotels has declined from 3.28 direct bookings for every one indirect booking to 2.67 direct bookings for every one indirect booking in 2016. The decline in direct bookings and rise in indirect bookings reflects an 18.5% decline in the overall Transient Direct-to-Indirect booking ratio in just 2 years.

Exhibit 13 highlights each booking channel’s share of total room night demand in the twelve months ending in June of 2014, 2015 and 2016. This data can be used to examine the change in overall channel share over the past three years. As can be seen in Exhibit 13, bookings made directly to the property have experienced by far the sharpest decline of any of the booking channels. Over that same time the share of Group, Voice and FIT Wholesale have been roughly flat. It should be noted that a longer time series view would reveal a general downward trend in the percentage of total bookings made through the voice booking channel.
With easy access to digital booking tools, consumers have distinctly more flexibility in the booking process than they had in the past. This, coupled with the increasing consumer comfort in using digital methods to book, has resulted in the severe decline in the property direct channel. Those guests who previously called a property or drove up/walked in, are now often turning to mobile apps or websites to shop before getting on the road. While there has been a sizeable decline in the share of bookings through these traditional channels, it is important to note that overall room demand has increased in the U.S. in each of the past 5 years so the absolute number of bookings does not show as pronounced a decline.

Conversely, several booking channels have shown solid growth since 2014. Brand.com, OTA and GDS booking channels all have a substantially greater share of total bookings than they did 3 years ago. Their growth has been led by the OTA Source of Business growing share by 28%, followed by Brand.com at 9% and GDS at 7%. The initial size of each of these channels affects their growth rate and Brand.com has been approximately twice the demand share of OTA. That gap started to close only in the last two years. These three digital channels taken together represent about 42% of all room nights in 2016.

Now that the shift to digital channels is taking place, it is important to consider the cost implications inherent in that shift with respect to each booking channel. It is generally accepted that bookings made directly to the property are the most financially beneficial for hotels as they generally do not incur a commission. This is in contrast to indirect channels which often have a fee or commission associated with every booking. There are other types of costs associated with bookings made directly to the property, such as channel costs, transaction fees and loyalty fees. However, these costs remain significantly lower than those associated with indirect channels. This is important to note given the recent push by some brands to encourage customers to book directly on Brand.com. Exhibit 14 examines the cost of customer acquisition by Source of Business and cost category.

Exhibit 14 presents the cost of sales by Source of Business for the 12 months ending in June of 2016, shown as a booking cost index. This cost of sales measure is calculated as a percentage of Guest-Paid Revenue for each Source of Business and compared against the base of the cost level for the Property Direct Source of Business, which has the lowest level of customer acquisition costs among the sources. In other words, this index presents the relative value of a booking through
Understanding U.S. Lodging Performance

Exhibit 14
2016 Cost of Sales
U.S. Total

Source of Business Booking Cost Index
(indexed to Property Direct cost)

- Wholesale Commissions
- Retail Commissions
- Loyalty Investment
- Channel Cost

<table>
<thead>
<tr>
<th>Source of Business</th>
<th>Wholesale</th>
<th>Retail</th>
<th>Loyalty Investment</th>
<th>Channel Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand.com</td>
<td>263</td>
<td>194</td>
<td>100</td>
<td>238</td>
</tr>
<tr>
<td>Voice</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Property Direct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTA</td>
<td>687</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDS</td>
<td>509</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIT Wholesale</td>
<td>586</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Index of Cost % of Guest-Paid Revenue | 12 months ending in June 2016
2016 Kalibri Labs

each channel. The lower the index value by channel, the less an average booking costs through that channel. As shown, the total costs are much higher for the indirect booking channels, particularly OTAs and FIT Wholesale which are more than five times the costs associated with Property Direct. Not surprisingly, the highest cost component is the commission expense, including both the retail model and wholesale models. For the direct channels, the loyalty investment costs make up a significant portion of the booking channel expense. Retail Commissions within the Brand.com Source of Business include any metasearch, performance marketing, and search engine marketing commissions for actualized bookings.

COST CATEGORIES

These cost categories are defined as:

- Retail Commissions — includes fees paid to retail or hotel-collect travel agencies. In this commission model, the hotel pays a percentage of the room revenue for each booking made by the intermediary, usually after the stay has occurred.
- Wholesale Commissions — includes fees paid to net, merchant, opaque, or wholesale third parties. These commissions are used to gross up Hotel-Collected Revenue to calculate Guest-Paid Revenue and may be referred to as pre-paid commissions.
- Channel Cost — includes costs to connect to a given booking channel. These fees can be applied as a flat fee and/or a percentage of the booking revenue and while they may apply to all channels, they are most commonly incurred for Voice, GDS or Brand.com bookings.
- Loyalty Investment — includes costs incurred for bookings made by loyalty guests. These costs typically include the cost of loyalty points, loyalty amenities, and loyalty services. Loyalty Investment can be a percentage of room revenue or total revenue, can vary based on the loyalty member tier, and are not applied when the booking is marked as loyalty ineligible (e.g. a loyalty member books through an OTA).
Despite the current positive business environment, OTA commissions have risen at almost triple the rate of Guest-Paid Revenue growth, as shown on Exhibit 15. The industry has seen record RevPAR performance, but these commissions have grown significantly faster than revenue. Additionally, the commission growth is nearly double that of the growth in loyalty fees paid out on each transaction for loyalty guests. The industry has been able to better manage channel fees and non-OTA commission costs as those costs are tracking very closely with revenue growth.

As economic times change and digital innovation shifts how consumers book hotels, understanding and managing channel mix and the costs associated with each channel will become an increasingly important discipline.

**OCCUPANCY**

Over the past 25 years, occupancy in the U.S. hotel industry has fluctuated as supply additions and economic influences on demand took their turns driving that change. However, over the past 5 years the pattern has shifted to a more stable occupancy growth cycle, which is a considerable deviation from the pattern of the 20 years prior to 2010 where occupancy growth cycles tended to plateau after a period of growth. This pattern is seen in Exhibit 16 which presents U.S. industry occupancy levels since 2004. This is the result of the extremely favorable supply/demand relationship that has existed since at least 2004.

Prior to the current cycle of occupancy growth where industry occupancy levels reached just over 67% in mid-2015, the previous peaks settled in at under 65%, before stabilizing. What makes the current cycle so unusual is that based on occupancy levels achieved during the prior recovery cycles, it was beginning to appear that U.S. national occupancy levels would be hard pressed to ever exceed the prior peak reached in 1996. However, the current cycle has turned out to be different, resulting in record setting occupancy levels. Conventional wisdom suggests that the industry begins to achieve substantial profitability when occupancy exceeds about 62%, however, the increasing costs of customer acquisition rising over the last five years along with transparency in rates have tempered what should have been a more robust profit cycle.
TOP 25 MARKETS

Hotel customer channel of choice varies quite a bit by market as many dynamics are at play. Such things as hotel supply makeup, percentage of groups and meetings, business/leisure mix, number of international visitors and type of destination to name just a few play a part in this process. With varied market characteristics it is not surprising that the percentage of rooms booked through both Brand.com and OTAs can vary substantially by market.

When examining the top 25 markets, in 2015 the disparity in the percentage of rooms booked through the OTAs is quite dramatic, ranging from a high of over 17% in NYC to a low of 9.3% in Detroit. In addition to NYC, the other cities with the highest percentage of OTAs all share the common trait of having a customer base that is highly leisure with a mix of both international and domestic travelers. At the other end of the spectrum, the markets with smallest percentage of reservations going through the OTAs tend to be primarily business destinations. Even with the advent of OTA Pay Later models and the fast growth of Booking.com, in every market the most common booking type is the Merchant (Net) model. While Opaque business has declined overall throughout the U.S., some markets still have a sizeable portion such as Minneapolis, Austin and Houston.

When looking at the bookings made using Brand.com, while there is a disparity in the
percentage by market, it is not as broad as through the OTAs, ranging from a high of 22.5% in Seattle to a low of 18.8% in Minneapolis. The percentage of bookings made through Brand.com is higher than the percentage made using OTAs. Interestingly, some of the same cities that show up with the lowest percentage of OTA bookings also report a low percentage of bookings through Brand.com. This would imply that these markets may have more opportunity to increase digital bookings in general.

As has been documented throughout the *Demystifying the Digital Marketplace* study, hotel bookings made using Brand.com tend to be more profitable bookings for hotels. Considering the cost of customer acquisition is certainly a critical factor in building a hotel’s Optimal Business Mix.
Examining tiers of the industry, broken out by room rate performance, there are noticeable differences between the types of hotels in the industry. The biggest difference is the occupancy disparity among the traditional chain scale categories. Of the six traditional segments, only one, Upper Midscale, has occupancy levels that are consistent with the total U.S. average of 67%. The others are either well above the industry average or substantially below it. Specifically, the three higher priced segments, Luxury, Upper Upscale and Upscale (Upper tier) all reported occupancy levels around 75% in 2016, while the lower priced segments, Midscale and Economy (Lower tier), experienced occupancy levels around 60%. Based on the consistent year to year difference in occupancy levels among the higher tier and lower price segments, it appears that the U.S. industry has three distinct levels of occupancy performance. When considering occupancy performance by rate tier, it is important to consider the factors that drive these differing levels of occupancy performance.

Factors such as the amount of available rooms in each segment, types of travelers (group, business transient and leisure transient), the guest dynamic relative to stay patterns, and the nature of the current economic environment all play a role. In addition, the relative levels and amount of debt service and break even occupancy unique to the chain scales are also considerations that influence the objectives set by the properties that drive their tactics.

**ROOM REVENUE – GUEST-PAID VS. HOTEL-COLLECTED**

As previously shown on Exhibit 1, U.S. lodging industry hotel-collected room revenue set a new all-time high of roughly $150 billion in the 12 months ending in June of 2016, up just 4.5% from the prior year. What is often left out of any discussion of lodging industry room revenues is the amount that the guest pays that does not show up on any hotel P&L statement. That undocumented revenue is the result of hotel room bookings that are made through...
an intermediary, typically an OTA or wholesaler when the guest pays the third party rather than the hotel. There are typically three types of commission models employed by booking vendors that offer their services to hotels.

They are:

- Merchant (Net) – The Merchant (Net) model is applied when a consumer pays an OTA or wholesaler directly and then the OTA or wholesale agent pays the hotel a previously agreed net amount. The vendor keeps the difference as their commission. The hotel does not collect the room rate nor does it directly pay a commission to the vendor. There is no cost documented on the hotel P&L even though the vendor earned a commission. In calculating Guest-Paid Revenue, Merchant (Net), or Wholesale Commissions are added to the Hotel-Collected Revenue.

- Retail – The Retail model is used when a guest pays the room rate directly to the hotel and then the hotel cuts a check for an agreed commission to the vendor after the guest has departed.

- Opaque / bidding method – The Opaque model works like the Merchant (Net) model in that a guest pays the vendor directly and the vendor passes on an agreed net rate, keeping the difference as a commission. However, the consumer experience is different in that the brand of the hotel is not disclosed by the vendor until after the sale. Typically, the percentage of the room rate kept by the vendor is higher in this model than in the merchant or retail scenarios. The commission can be as high as 35% to 50%.

As stated previously, the number of hotel rooms booked through OTAs has continued to grow each year. In addition, in recent years there has been a shift in how hotels have utilized the business model options available to them. Exhibit 17 shows the online intermediary breakout by business model. The Opaque model declined by almost 10% compared to the high growth seen in the Merchant (Net) model and dramatic growth in the Retail model.
Understanding U.S. Lodging Performance

The Merchant (Net) model vendors are paid directly by the guest and only send a portion of that rate to the hotel; the hotel posts the net rate only to its P&L with no corresponding expense. Therefore, the hotel is not able to document the real room revenue paid to the vendor by the guest nor can it document the expense associated with the booking. In both cases, the hotel room revenue and expense are understated on the hotel P&L.

In contrast, the more traditional Retail commission model requires that a fee to the intermediary be paid after all room revenue paid by the guest has been recorded on a hotel's financial statements. In this type of arrangement, the actual cost of the channel can be tracked because it is a P&L expense item.

Given this accounting treatment, the dominant Merchant OTA compensation model, making up approximately half of all OTA volume in the U.S., has the effect of underestimating total customer spend on hotel rooms, both at the property level and industry wide, because hotels cannot accurately track that spend nor report it for aggregated industry reporting. This results in a significant underestimating of the total customer spend as well as industry average room rates.

In the data collection efforts for this study, and with the help of the participating hotel companies, Kalibri Labs was able to estimate the unreported customer spend on hotels over the past 5 years using the opaque and net/merchant models. Exhibit 18 presents both the currently reported hotel-collected industry room revenue as well as the estimated guest-paid room revenue. In the 12 months ending in June of 2016 the amount that customers spent on hotels that was not reflected on P&Ls was approximately $3.6 billion compared to $3.2 billion in the prior 12-month period.

On a COPE Revenue basis (Contribution to Operating Profit and Expenses), which examines revenue after direct transaction related customer acquisition costs are removed, the industry grew revenue by 4.3% from the 12 months ended June 2015 when compared to the same period in 2016. At the same time, the COPE % of the industry declined by 0.3%. The COPE % measures how much the hotel keeps of what the guest pays after direct transactional customer acquisition costs are removed; direct costs include wholesale and retail commissions, channel costs, transaction fees and loyalty costs. Had the industry kept its COPE % stable from 2015 to 2016, an additional $300 million would have been retained by hotel companies.

Exhibit 18

<table>
<thead>
<tr>
<th>Revenue Capture</th>
<th>Total U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guest-Paid Revenue</td>
<td>$140.4 B (+4.6%)</td>
</tr>
<tr>
<td>Hotel-Collected Revenue</td>
<td>$137.2 B (+4.5%)</td>
</tr>
<tr>
<td>COPE Revenue</td>
<td>$129.1 B (+4.3%)</td>
</tr>
</tbody>
</table>

12 months ending in June 2015 and 2016

2016 Kalibri Labs
Of all the metrics that the hotel industry tracks, perhaps the one that is most influenced by the current economic state of the industry is ADR. Industry behavior from a pricing standpoint brings together all the factors affecting performance from both an industry and economic standpoint. Traditionally, the reporting of ADR has been limited to what hotels can report based on their P&L statements. However, as stated earlier, with an increasing amount of commission expense, both wholesale and retail, more detailed ADR metrics would provide considerable benefit to hotel management. With that in mind, it becomes increasingly important that the hotel industry track ADR and its movement in a more granular manner, using the following metrics:

- **Guest-Paid ADR** – Reflects the total amount that the guest has actually paid for the room, including wholesale commissions that are not documented on a hotel P&L.
- **Hotel-Collected ADR** – Reflects room revenue paid directly to the hotel (the traditional measure).
- **COPE ADR (Contribution to Operating Profit and Expense)** – Measures the room rate remaining after all expenses associated with the transaction are deducted, including wholesale and retail commissions, channel costs, transaction fees and loyalty expenses.

### Exhibit 19
**Change in COPE* U.S. Total**

<table>
<thead>
<tr>
<th></th>
<th>COPE* Revenue</th>
<th>COPE* %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$134,585,000,000</td>
<td>91.5%</td>
</tr>
<tr>
<td>2015</td>
<td>$129,065,000,000</td>
<td>91.8%</td>
</tr>
<tr>
<td>Change</td>
<td>+ 4.3%</td>
<td>- 0.3%</td>
</tr>
</tbody>
</table>

* Contribution to Operating Profit and Expenses

12 months ending in June 2015 and 2016

2016 Kalibri Labs
ADR – A HISTORICAL PERSPECTIVE

For the U.S. lodging industry to have truly outstanding performance, increased revenue and profitability need to come from a combination of having more guests in rooms coupled with increasing the price guests pay and acquiring those guests as efficiently as possible. While both increased occupancy and room rates are catalysts for success, increasing room rates at reasonable costs tends to be a more efficient driver of profitability.

Over the past 25 years, much has changed in both how the industry prices rooms and how pricing is affected by market conditions and the behavior of each property’s competitors. During the past two and a half decades hoteliers’ ability to quickly react to market conditions by modifying their pricing has increased substantially. Prior to the 1990s, hotel room rates were essentially set twice a year, with little ability to change them quickly or communicate that change to potential customers. As a result, lodging industry room rates did not decline during the recession of the early 1990s, as illustrated in Exhibit H. While room rate growth did decline slightly as occupancy drifted downward, the hotel industry’s pricing response to market conditions both lagged and was relatively muted. The same can be said about the industry’s price increases as economic conditions improved toward the middle of the decade. However, beginning in the late 1990s, the rise of the internet and the advent of other technological developments began to change the way hotel rooms were distributed, marketed, and sold to consumers.
In addition to the changing nature of how potential guests could search for and book rooms, the Internet gave hotel operators the ability to modify their room rates quickly and frequently. In this new world, hoteliers were now able to modify their price offerings in reaction to market conditions. At the same time, technological advances provided operators a constant window into their competitors’ actions.

Toward the end of 2001, the increased ability to modify pricing and deteriorating economic conditions resulted in rapidly declining room rates as occupancies fell. The speed with which hotels were collectively able to react to market conditions can be seen in Exhibit H. Conversely, once industry performance recovered in the middle part of that decade, this new-found ability to quickly modify room rates seemed to help the industry accelerate room rate growth in that robust economic cycle.

As the U.S. economy began to slip into a period of malaise in 2008, hoteliers again reacted quickly to the changing environment. With occupancy declining as room night demand began to grow sluggish, the industry-wide drop in pricing was even more immediate and severe than in either of the prior two downturns. In fact, the decline in average room rates reported industrywide was the sharpest percentage drop reported since that data was accurately tracked.

In addition to the downward pressure on pricing created by the recessionary U.S. economy, another factor was also at play; the increasing tendency of consumers to book rooms at the last minute. With historically low occupancies, many rooms remained unfilled which drove hoteliers to embrace new tactics to fill them. Chief among these new tactics was to offer increasingly discounts for last minute bookings while simultaneously using an increased array of third party intermediar-ies. This, coupled with the internet providing immediate visibility to the pricing behavior of a hotel’s competitors, seemed to lead to an exaggerated downward pricing spiral during the recession of 2008/2009. In addition, it also appears that the twin factors of pricing transparency by the internet and multiple booking options can have the effect of restraining room rate growth even in the strongest of lodging cycles.

Referring again to Exhibit H, there is no doubt that the U.S. lodging industry is currently experiencing one of the strongest performance cycles in its long history, with the best supply/demand fundamentals since those indicators have been tracked, resulting in the highest industry occupancies reported in a half century. In this kind of environment, it would have been easy to forecast ADR growth that would also be setting percentage increase records. However, this has not been the case and, in fact, room rate growth has lagged well behind the rate of growth reported during the last two industry recoveries, peaking at about 4.6 percent in 2015. This growth is far below the peaks reported in both the mid-1990 and mid 2000’s. While there has been much to cheer about during the current lodging cycle, the cheering could have been much louder if room rate performance had mirrored that of past recovery periods.

There is no singular reason as to why room rate growth has been stubbornly restrained in this cycle. This is a complicated pricing world filled with lots of decision points for operators and revenue managers. However, there are a handful of factors to identify and a few more that are a bit subtler. They are:

- High and increasing cost of customer acquisition
- Room rate transparency through digital channels
Outward gazing (spending too much time looking at what your competitors are doing as opposed to establishing the value of your product)

- Reduced booking windows
- Daily occupancy patterns
- Alternative accommodations
- Revenue managers’ compensation and reward systems

Pricing in a digital and increasingly social world has changed the ADR growth paradigm. However, it still makes sense to find ways to enhance the industry’s understanding of pricing performance and behavior so that in future lodging cycles, room rate growth can track better with demand and result in a sustainable profit profile for the industry. Further, the added dimension of acquisition cost will factor into the quest for profitability going forward.

Exhibit 20 illustrates how each of the Revenue types are calculated.
To track appropriately and to measure ADR performance, both at a property level and at an aggregated market level, hotel management must understand what the guest actually paid for the room. Historically, reported ADRs have used Hotel-Collected ADR to report room revenue, not what the Guest-Paid. Additionally, the industry has paid little attention to how much expense is incurred as part of every transaction. Exhibit 21 presents the three ADR types for all U.S. hotels for the 12 months ending in June of 2014, 2015 and 2016.

As clearly shown on Exhibit 21, there is a substantial difference between what the Guest-Paid for a room and what was collected by the hotels. In the 12 months ending in June of 2016 the differential was $2.98 per occupied room, or about $3.58 billion nationally for the same time period. On a national level that was up from $3.20 billion in 2015, meaning that the industry paid an additional $380 million in wholesale commission fees as compared to the amount paid in the prior year.

When the additional costs of customer acquisition are deducted, the total transactional cost of customer acquisition, before Sales and Marketing expense, increased to $10.48 per occupied room. Again, extrapolating that expense to the total U.S. number, the industry spent at least $12.6 billion dollars on an annualized basis for direct transaction expenses associated with acquiring the customer. That means over 8% of all room revenue is spent on acquiring the customer before Sales and Marketing expense is added to the total.

Looked at another way, after the direct expenses associated with getting the guest in the door, the industry retained less than 92% of Guest-Paid Revenue. The COPE percentage was 91.5% in the 12 months ending in June 2016, down from 91.8% the 12 months prior. Exhibit 22 presents the total U.S. COPE percentage for each of the past 3 years.
Understanding U.S. Lodging Performance

As discussed earlier, there are many booking channels and each has a cost associated with it. Booking channels that enable the consumer to book directly with the hotel tend to be more profitable for hotels, as shown on Exhibit 23, which presents COPE ADR for each of the booking channels for the 3 years ending in June 2014, 2015 and 2016. A second observation gleaned from the data is that the year over year increases in the COPE ADR are a bit smaller than those of both Guest-Paid ADR and Hotel-Collected ADR. As the industry continues to spend more money in acquiring the customer, the result will be less of the guest spend available to run the hotel operation and to reinvest in the guest experience or to improve the value of the asset.

Hotel industry room rates are highly seasonal in nature and typically change by time of year and day of week. The habit of pricing by season or week part often results in wide fluctuations in room rates over the course of a year with the intent to maximize revenue by increasing or decreasing rates based on anticipated or historical demand levels. While there is certainly historical precedent supporting this behavior, perhaps a better understanding of the price elasticity of demand would alter the magnitude of seasonal changes. If hotels better understood how little hotel demand may increase as a result of lowered rates, hotels might make different pricing decisions. In the hotel market where demand is relatively inelastic (i.e., rates won’t fluctuate directly with demand due to the high degree of non-discretionary travel), they are most often not raising ADR sufficiently during peak months, or may be lowering them too much during slow months. This is compounded by the common practice of raising or lowering rates uniformly across all guests rather than customizing rates by guest type, e.g., trip purpose, geographic origin or past preference, so each guest’s demand profile is taken into account. As technology evolves, the ability to match rates and products to consumers will gradually improve.
By utilizing and understanding the full complement of ADR measures, hotel operators in the future will have one more tool to help generate better efficiency and profitability.

**REVENUE PER AVAILABLE ROOM (RevPAR)**

As RevPAR combines the effects of both occupancy and room rate performance, it is often used to gauge the general economic health of both the industry and individual hotels. As has been the case with the other traditional key indicators of overall industry performance (supply, demand, occupancy and Hotel-Collected ADR), the traditional metric of total U.S. RevPAR has been at an all-time high from an absolute dollar amount.

Since RevPAR is a function of both occupancy and ADR, its movement can be influenced by swings in either of these measures. Therefore, movements in RevPAR can frequently be quite dramatic, especially if both occupancy and ADR changes are headed in the same direction during robust market conditions or an economic downturn.

Typically, in a recessionary economic environment, demand begins to decline which in turn prompts hoteliers to drop room rates resulting in rapidly declining RevPAR as was seen both in the early 2000s and after the 2008/2009 recession. When the cycle turns and the U.S. economy swings into a growth period, as it has done over the past 5 years, rarely do both occupancy and ADR improve at the same time and with the same arc. During this recovery pattern, occupancy typically improves first, and in the initial stages of a recovery it is the primary driver of RevPAR growth. As the overall economy continues to improve, ADR growth usually does as well and for a period of time RevPAR acceleration is driven by a combination of both occupancy and ADR. Then, as the lodging industry enters the mature stages of a recovery, occupancy growth tends to slow a bit and ADR improvement becomes the force behind the continued RevPAR improvement. At this point in the cycle, industry profitability tends to improve rapidly because the majority of revenue growth comes from a property's ability to increase ADR, and a much higher percentage of that revenue finds its way to the bottom line, provided cost of sales is managed.

Exhibit 24 presents U.S. lodging industry RevPAR growth from 1990 through 2015. The unprecedented strength of the current lodging industry fundamentals has propelled relatively strong RevPAR growth through the first half of this decade. However, with
ADR specifically, even stronger results could have been a natural expectation. RevPAR growth has been flat to decelerating during the past several years, perhaps indicating that the U.S. lodging industry is beginning to approach the later stages of this recovery. Applying Kalibri Labs’ costing methodology to recent RevPAR changes reveals a marked difference in growth rates after the cost of customer acquisition is
incorporated. As shown in Exhibit 25, while there were growth rates of 7.2% in 2015 and 3.3% in 2016 in Guest-Paid RevPAR, the COPE RevPAR growth dropped to only 6.9% and 3.0% respectively after wholesale and retail commissions are considered. This indicates that due to the shift to the third party channels, the RevPAR growth, after accounting for direct customer acquisition costs, has been eroded beyond what has been visible at the top line. This iceberg beneath the surface needs to be tracked carefully as third party bookings continue to gain momentum.
CONSUMER REVIEWS, CHANNEL MIX AND PROFIT CONTRIBUTION: IS THERE A RELATIONSHIP?

A recent study based on data from ReviewPro and Kalibri Labs, conducted by Professor Cathy Enz of the Cornell University School of Hotel Administration, revealed that higher Brand.com room night share correlates positively with high online customer review rankings.

Professor Enz utilized monthly channel and revenue performance data from Kalibri Labs to evaluate hotel behavior. This was combined with hotel-matched aggregated online review data from ReviewPro in the form of the Global Review Index, an industry-standard online reputation score calculated from reviews aggregated across 175 OTAs and review sites. Along with controls for star rating, location and other hotel-specific features, these data points allowed Professor Enz to determine correlations between channel share, review volume, review scores and COPE RevPAR* performance.

She found that there is a positive and significant correlation between favorable reviews and COPE RevPAR performance. In other words, hotels with higher overall review scores consistently delivered better COPE RevPAR performance.

Hotels with a greater proportion of direct Brand.com business receive generally higher review rankings. For three-star hotels, Brand.com bookings also correlate with higher COPE RevPAR performance. The importance of driving direct business and maintaining a positive online reputation is clear, as these factors have a direct correlation with higher profit contribution.

*COPE revenue per available room, or COPE RevPAR, is room revenue after direct transaction costs such as commissions, loyalty and other channel costs are removed. COPE RevPAR does not account for sales and marketing costs.
Detailed Analysis of Hotel Segments: Upper, Middle and Lower Tiers

Following an examination of high-level industry trends, it is important to delve into specific pricing tiers and slices of the market to understand how these changes impact the different segments of hotels in the industry. Those same key metrics discussed at an industry level can be examined down to more specific hotel types. In this section, hotel performance metrics based on traditional chain scales as well as rolled up “tiers” will be examined.

The tiers break out as follows:

- **Upper Tier** – Upscale, Upper Upscale and Luxury chain scales
- **Middle Tier** – Upper Midscale chain scale
- **Lower Tier** – Economy and Midscale chain scales

These groupings allow a wider view of trends across these swaths of the industry that can then be sliced more granularly at the chain scale level.

**UPPER TIER HOTEL PERFORMANCE**

*Upper Tier Summary: Luxury, Upper Upscale and Upscale Chain Scales*

Several high-level trends were evident in the performance of the Upper Tier and the chain scales within it, Luxury, Upper Upscale and Upscale.

- The Upper Tier has seen the smallest impact on COPE RevPAR growth due to channel shift of the chain scales within this tier. The difference between Hotel-Collected RevPAR growth and COPE RevPAR growth for the tier was only -0.1%. This means that COPE RevPAR, which measures RevPAR after direct customer acquisition costs are removed, grew 0.1% less in 2016 than did Hotel-Collected RevPAR or standard P&L RevPAR.
  - This difference highlights the positive impact of channel shift and acquisition cost increase on RevPAR. Due to the different mix of business and increase of acquisition cost for the tier, COPE RevPAR grew only slightly more slowly than did Hotel-Collected, which is the traditional topline RevPAR metric.

- In the past 12 months for the Upper Tier, Brand.com and OTA room night share grew 6.2% and 6.3% respectively and GDS grew 3.2%.
  - OTA growth slowed in 2016 compared to the 7.6% growth in the prior 12 months. This slowdown in OTA growth, coupled with Brand.com increasing in 2016 to 6.2% from 4.7% in the prior 12 months, is a positive sign for the efforts that some brands are undertaking in the Upper Tier to drive direct bookings.

- The Upper Tier has the highest penetration of loyalty member room nights of any of the tiers. This is driven in large part by the Upper Upscale and Upscale chain scales.
  - The percentage of loyalty bookers or loyalty demand % for the Upper Tier grew 6.6% from 2014 to 2016. The loyalty penetration of the Brand.com source within the Upper Tier is the strongest of all sources of business and has grown almost 7% through mid-2016.
  - Taken together, the increasing share of Brand.com volume within this tier along with the increased loyalty penetration within Brand.com has driven this steady increase in overall loyalty demand %. Stay brands with loyalty programs in this tier are getting better not only at driving bookers to Brand.com but also at converting those bookers to loyalty program members.

- Year over year, Upper Upscale remained flat and Upscale declined only 0.1% in COPE %. This figure measures how much a hotel retains of what the guest-paid after the direct customer acquisition costs are removed. It is a vital measure of the relative financial impact of channel shift.
  - Driving this were increases in Brand.com share along with a shift in the OTA model mix further away from Opaque business to Merchant (Net) and Retail.
Upper Tier: Demand and Occupancy
As noted above, hotel room night demand has grown significantly across the industry for several years running although it appears to be slowing somewhat in 2016. The main segment behind this is the Upper Tier and within that, specifically Upscale is driving much of the growth. There has been a significant expansion in the inventory within this chain scale over the past several years with new brands being introduced as well as growth within existing brands from major players.

As shown in Exhibit 27, while there has been significant growth in overall room nights in Upscale, 4.1% year over year, as well as in Guest-Paid Revenue, 8.0% year over year, the occupancy for this chain scale has dipped slightly to 74.2% in 2016 from 74.5% in the prior year.

The rest of the Upper Tier chain scales show similar dips in occupancy year over year ranging from 0.2% for Upper Upscale to 1.8% for Luxury.

The Upper Tier has the most significant dip in occupancy of the tiers with the Lower Tier at -0.1% and the Middle Tier at +0.2%. This is after the prior 12 months showed occupancy growing or remaining relatively steady.

Exhibit 26
Occupancy %
Tiers

<table>
<thead>
<tr>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Tier</td>
<td>Middle Tier</td>
<td>Upper Tier</td>
</tr>
<tr>
<td>73.2%</td>
<td>64.9%</td>
<td>58.2%</td>
</tr>
<tr>
<td>74.4%</td>
<td>67.1%</td>
<td>59.3%</td>
</tr>
<tr>
<td>74.0%</td>
<td>67.2%</td>
<td>59.3%</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016
2016 Kalibri Labs
Revenue growth for all Upper Tier chain scales has slowed despite the increases in supply. COPE RevPAR, calculated after direct costs of acquisition are removed from the Guest-Paid revenue, for the tier is up 2.1% year over year after being up 6.1% the prior year. This is due to mild ADR growth and a decline in occupancy. The Luxury chain scale is the only chain scale in this analysis that has shown COPE RevPAR decline year over year, dropping 0.2% after remaining flat in the prior 12 months.

- The Upper Tier’s RevPAR growth for Guest-Paid, Hotel-Collected and COPE Revenue were all relatively similar, indicating a somewhat subdued impact of channel shift on growth.
- Exhibit 28 highlights the differences in RevPAR growth between Guest-Paid, Hotel-Collected(P&L) and COPE, after customer acquisition costs. The changes will be examined within the Upper Tier in more detail following this, but among all three tiers, the Upper Tier saw the smallest margin of variation in RevPAR growth between the three types of revenue. That means that costs were better contained and the growth of COPE revenue tracked most closely with the growth in Guest-Paid revenue. This means the Upper Tier hotels were able to capture more of the increase in Guest-Paid revenue.
- The Lower and Middle tier saw more dramatic channel shift changes than the Upper Tier, leading to sharper differences in RevPAR growth before and after acquisition costs are considered.
- The effect of channel shift within the Lower and Middle tiers was to further diminish COPE RevPAR growth. In contrast to the Upper Tier, the Lower and Middle Tiers did not contain costs as well and were not able to capture as much of the growth in Guest-Paid Revenue.
Upper Tier: Transient Direct-to-Indirect Ratio and Channel Share

Given the slowing growth of revenue and occupancy for the Upper Tier, it’s important to examine how the mix of business has shifted from a channel perspective. At a high level, the Transient Direct-to-Indirect Ratio can help evaluate this. This metric looks at how many direct room nights were generated for every one indirect room night.

Direct is defined as transient bookings coming through the Brand.com, Voice or Property Direct Sources of Business while indirect is defined as transient bookings coming through OTA, GDS or FIT Wholesale Sources of Business.

In 2014, the Transient Direct-to-Indirect Ratio for the Upper Tier was 1.99 – for every indirect room night there were 1.99 direct room nights. This metric has declined to 1.83 in 2016. The decrease is less significant than that of the other tiers but the Upper Tier is operating from a much smaller base. In 2016, the Lower Tier was at 3.99 and the Middle Tier was at 2.90. This owes to differences in channel mix amongst the tiers driven primarily by more Property Direct bookings in the Lower and Middle tiers compared to the Upper Tier.

The shift of formerly Property Direct room nights to other channels, including indirect channels, in part drove the change in Transient Direct-to-Indirect Ratio for Middle and Lower Tier hotels.

Overall, and within the Upper Tier, the Transient Direct-to-Indirect Ratio follows a pattern that inversely correlates with ADR – i.e. with a higher ADR tends to come a lower ratio. The primary reason for this is the high volume of Property Direct business that has historically come to Middle and Lower Tier properties such as walk-in or drive-up guests in contrast to the Upper Tier guests who have a higher ratio of pre-bookings.

Within the Upper Tier for 2016, Upscale Transient Direct-to-Indirect Ratio is at 2.02, Upper Upscale at 1.73 and Luxury at 1.21.

All have declined between 1.2% and 6.5% from last year but the chain scales within the Upper Tier have declined significantly less in the Transient Direct-to-Indirect Ratio than those of the Middle and Lower Tiers. The already relatively low Property Direct share as well as strong Brand.com growth have driven this performance.
Detailed Analysis of Hotel Segments

Exhibit 29
Direct: Indirect ratio Tiers

<table>
<thead>
<tr>
<th>Year</th>
<th>Lower Tier</th>
<th>Middle Tier</th>
<th>Upper Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>5.9</td>
<td>3.6</td>
<td>2.0</td>
</tr>
<tr>
<td>2015</td>
<td>5.3</td>
<td>3.2</td>
<td>1.9</td>
</tr>
<tr>
<td>2016</td>
<td>4.0</td>
<td>2.9</td>
<td>1.8</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016

On a room night share basis, shown in Exhibit 30, the Upper Tier has seen OTA grow from 8.7% of room nights in 2014 to 10.0% in 2016 giving it an overall growth of almost 14%.

GDS has remained relatively flat at 14.5% in 2016 while Group has declined slightly from 24.9% to 24.6%.

Voice and Property Direct have seen significant declines as customer booking trends continue to shift away from those channels and into digital channels.

Brand.com growth has been increasing over this period from a share of 21.5% of room nights to 23.9% in 2016. This room night share growth rate of 11.1% is slightly below that of OTAs 13.9%.

The room night shift from Voice and Property Direct has not completely fed into Brand.com. The opportunity to pick up those Voice and Property Direct room nights has been targeted by Brands and OTAs alike and the benefit of these shifting room nights has been shared.
The patterns seen for Upper Tier growth are mimicked for each of the chain scales within it, Luxury, Upper Upscale and Upscale, shown in Exhibits 31, 32, and 33.

- The large differences lie mostly in the split of Group and Transient business for these chain scales. Upscale has consistently drawn roughly 16% of its room nights from Group business whereas Upper Upscale was at 32% in 2016 and Luxury was at 35%.

- Luxury hotels appear to be more dependent on OTA and FIT/Wholesale business during this time period compared to the rest of this tier.

- For Luxury properties during this period, OTA share is roughly on par with that of Brand.com but growing at slightly more than twice the rate.

- In contrast, while the other Chain Scales also have stronger growth of the OTA share relative to Brand.com, the growth rates are only slightly higher (Upper Upscale 1.3 times and Upscale 1.2 times).
Detailed Analysis of Hotel Segments

Exhibit 31
Demand Share
Upscale

Source of Business
% of Actualized Room Nights

<table>
<thead>
<tr>
<th>Source</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand.com</td>
<td>23.7%</td>
<td>25.0%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Voice</td>
<td>8.8%</td>
<td>9.3%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Property Direct</td>
<td>24.7%</td>
<td>22.8%</td>
<td>20.8%</td>
</tr>
<tr>
<td>OTA</td>
<td>9.5%</td>
<td>10.1%</td>
<td>10.1%</td>
</tr>
<tr>
<td>GDS</td>
<td>16.4%</td>
<td>16.4%</td>
<td>16.2%</td>
</tr>
<tr>
<td>FIT Wholesale</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Group</td>
<td>16.2%</td>
<td>16.4%</td>
<td>16.1%</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016

2016 Kalibri Labs

Exhibit 32
Demand Share
Upper Upscale

Source of Business
% of Actualized Room Nights

<table>
<thead>
<tr>
<th>Source</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand.com</td>
<td>20.6%</td>
<td>21.3%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Voice</td>
<td>10.9%</td>
<td>10.2%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Property Direct</td>
<td>12.2%</td>
<td>11.2%</td>
<td>10.7%</td>
</tr>
<tr>
<td>OTA</td>
<td>8.9%</td>
<td>8.9%</td>
<td>9.3%</td>
</tr>
<tr>
<td>GDS</td>
<td>13.2%</td>
<td>13.1%</td>
<td>13.2%</td>
</tr>
<tr>
<td>FIT Wholesale</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Group</td>
<td>32.4%</td>
<td>32.7%</td>
<td>32.3%</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016

2016 Kalibri Labs
Growth and decline patterns remain constant when splitting out weekday (Sunday through Thursday), and weekend (Friday and Saturday) business for the Upper Tier, shown in Exhibits 34 and 35.

- The biggest difference is that a decline in weekend Group share appears to be driving the overall decline in that Source of Business whereas weekday is flat.

- Additionally, there has been significantly more OTA share growth in weekend business compared to weekday, as OTAs focus more effort on marketing to and serving weekday corporate business.
Detailed Analysis of Hotel Segments

### Exhibit 34
Weekday Demand Share
Upper Tier

#### Source of Business
% of Actualized Room Nights

<table>
<thead>
<tr>
<th>Source</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand.com</td>
<td>20.4%</td>
<td>21.4%</td>
<td>22.8%</td>
</tr>
<tr>
<td>Voice</td>
<td>9.7%</td>
<td>9.2%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Property Direct</td>
<td>17.1%</td>
<td>18.3%</td>
<td>16.8%</td>
</tr>
<tr>
<td>OTA</td>
<td>7.5%</td>
<td>7.0%</td>
<td>7.9%</td>
</tr>
<tr>
<td>GDS</td>
<td>18.2%</td>
<td>18.2%</td>
<td>18.8%</td>
</tr>
<tr>
<td>FIT Wholesale</td>
<td>2.4%</td>
<td>2.3%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Group</td>
<td>24.0%</td>
<td>24.3%</td>
<td>24.0%</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016 | Weekday includes Sunday-Thursday

### Exhibit 35
Weekend Demand Share
Upper Tier

#### Source of Business
% of Actualized Room Nights

<table>
<thead>
<tr>
<th>Source</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand.com</td>
<td>24.2%</td>
<td>26.2%</td>
<td>26.6%</td>
</tr>
<tr>
<td>Voice</td>
<td>12.3%</td>
<td>11.6%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Property Direct</td>
<td>15.2%</td>
<td>16.2%</td>
<td>16.2%</td>
</tr>
<tr>
<td>OTA</td>
<td>14.9%</td>
<td>14.1%</td>
<td>14.9%</td>
</tr>
<tr>
<td>GDS</td>
<td>4.4%</td>
<td>4.3%</td>
<td>4.4%</td>
</tr>
<tr>
<td>FIT Wholesale</td>
<td>2.0%</td>
<td>2.0%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Group</td>
<td>27.1%</td>
<td>26.6%</td>
<td>28.1%</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016 | Weekend includes Friday-Saturday

A KALIBRI LABS SPECIAL REPORT 49
Digging further into the changes in OTA share, the shifts in the business model mix, Merchant (Net), Retail and Opaque commission models were examined and are shown in Exhibit 36.

Two significant shifts have occurred over the past three years in terms of OTA model mix. Exhibit 36 takes the total OTA room night share for the Upper Tier and breaks it down by each of those models.

- Despite large overall growth for the OTA source, Opaque has declined consistently over this period. This is most likely due to the positive business environment in the U.S. hotel industry. As demand has improved, there is less inclination by the hotels to give inventory to an Opaque OTA, such as Hotwire or Priceline. The trend lines going forward will indicate if this is a permanent shift by the Upper Tier hotel segments away from Opaque or if share will rise when consumer demand declines.

- The other large shift has been the rapid growth of the Retail model in the United States. While the Merchant model is still dominant, Retail, driven in part by Booking.com as well as TripAdvisor and Expedia Traveler Preference, makes up a larger share of the OTA pie and has been growing at a more rapid pace than the Merchant model over the past three years. This trend will likely continue to shift as Booking.com grows, TripAdvisor gains share and Expedia’s Traveler Preference Program expands.

**BOOKING LEAD TIME**

Exhibit 1
2015 Booking Lead Time
U.S. Total

When examining booking lead time across the Sources of Business, Brand.com and GDS are predominantly booked furthest out from the day of arrival.

For weekday arrivals, defined as Sunday through Thursday, 55% of GDS and 48% of Brand.com reservations are booked at least seven days from arrival. In contrast, 40% of OTA reservations are booked at least seven days from arrival. Conversely, even for weekday arrival, 60% of OTA reservations occur within a week of arrival.
For weekday arrivals, the Voice Source of Business follows a nearly identical lead time pattern to OTA business. When examining the week leading up to arrival, a higher percentage of total OTA nights are booked compared to Voice, but examining between one week and one month out the pattern between the two is similar.

Given the nature of GDS and corporate business it is not surprising that weekday business is booked heavily between 7-21 days ahead of arrival. In contrast with the sharp uptick in GDS bookings at 14 days from arrival, weekday Brand.com bookings steadily ramp up from three weeks out. 25% of Brand.com weekday bookings occur at least 19 days from arrival.

For bookings with a weekend arrival, defined as Friday and Saturday, the lead time for all sources of business lengthens. Whereas for weekday arrivals 25% of Brand.com bookings are booked at least 19 days out, for weekend arrivals this figure jumps to 28 days out. Sixty-six days prior to arrival 10% of Brand.com bookings have already been made. Brand.com has the longest booking window amongst the sources of business for weekend arrivals.

Additionally, in contrast to weekday arrivals, the Voice Source of Business has a markedly longer booking window than the OTA source for weekends. Twenty-five percent of Voice bookings are made 21 days from arrival compared to 18 days for OTA. This figure converges at 50% of bookings through those two sources being made at least four days prior to arrival.

**Exhibit J**

2015 Booking Lead Time

U.S. Total

<table>
<thead>
<tr>
<th>Source of Business</th>
<th>% of Reservations Booked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand.com</td>
<td>25%</td>
</tr>
<tr>
<td>Voice</td>
<td>21%</td>
</tr>
<tr>
<td>Property Direct</td>
<td>12%</td>
</tr>
<tr>
<td>OTA</td>
<td>10%</td>
</tr>
<tr>
<td>GDS</td>
<td>9%</td>
</tr>
</tbody>
</table>

Excludes Group, FIT/Wholesale and Internal Discounts | Weekend includes Friday-Saturday 2016 Kalibri Labs
Overall loyalty demand share, or the percentage of room nights booked through a brand loyalty program, is strong and has increased across tiers over the past three years at a healthy clip as shown in Exhibit 37.

- The Upper Tier holds a very slight edge in 2016 over the Middle Tier in terms of loyalty demand share. This figure has increased slowly but steadily over the past several years driven primarily by Brand.com growth.
- On a very high base, the Upper Tier loyalty demand share has grown 6.5% from 2014 to 2016 with the Middle Tier growing at 7.4%. The Lower Tier, driven largely by the Economy chain scale, had the strongest growth (17%) but it was on a much lower base with less than half the penetration of the higher rated tiers.
- The bulk of this loyalty demand share is driven by Upper Tier chain scales and, more specifically, Upscale and Upper Upscale, shown in Exhibit 38. Upscale and Upper Upscale have both seen significant jumps in loyalty demand share from 2015 to 2016 due to increased loyalty penetration in Brand.com.
Exhibit 37
Loyalty Demand

Tiers
% of Actualized Room Nights
- Non-Loyalty
- Loyalty

<table>
<thead>
<tr>
<th>Tier</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Tier</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Tier</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Tier</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+ 17.0%
+ 7.4%
+ 6.5%

12 months ending in June 2014, 2015 and 2016
2016 Kalibri Labs

Exhibit 38
Loyalty Demand

Chain Scales
% of Actualized Room Nights
- Non-Loyalty
- Loyalty

<table>
<thead>
<tr>
<th>Chain Scale</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midscale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Midscale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upscale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Upscale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luxury</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+ 32.6%
+ 7.6%
+ 7.4%
+ 4.3%
+ 8.5%
+ 6.8%

12 months ending in June 2014, 2015 and 2016
2016 Kalibri Labs
Focusing primarily on the direct channels in the Upper Tier, there are steady increases in the percentage of consumers booking with a loyalty account. Exhibit 39 shows the loyalty demand by source for the Upper Tier.

- For the Upper Tier in 2016, more than 8 in 10 room nights that came through Brand.com had a loyalty account associated with them.
- Voice has increased to 74% while Property Direct has remained roughly flat.
- This is due to the efforts on the part of some brands to ensure that as many bookers as possible are part of their loyalty program. Loyalty demand share is expected to continue to climb through the rest of 2016 and beyond as the effect of the various Book Direct efforts play out.

Examining the Brand.com loyalty demand share growth for the Upscale chain scale, shown in Exhibit 40, illustrates the impact that Book Direct efforts are already having.

- Loyalty room nights through Brand.com as a share of total room nights grew 7.5% from 2014 to 2015 and grew substantially faster at 10.1% from 2015 to 2016.
Detailed Analysis of Hotel Segments

**Exhibit 40**
Loyalty Demand
Upscale

Source of Business
% of Actualized Room Nights

- Non-Loyalty
- Loyalty

<table>
<thead>
<tr>
<th>Source</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand.com</td>
<td>79%</td>
<td>81%</td>
<td>84%</td>
</tr>
<tr>
<td>Voice</td>
<td>73%</td>
<td>74%</td>
<td>76%</td>
</tr>
<tr>
<td>Property Direct</td>
<td>65%</td>
<td>53%</td>
<td>64%</td>
</tr>
<tr>
<td>OTA</td>
<td>13%</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>GDS</td>
<td>75%</td>
<td>74%</td>
<td>76%</td>
</tr>
<tr>
<td>FIT Wholesale</td>
<td>42%</td>
<td>44%</td>
<td>46%</td>
</tr>
<tr>
<td>Group</td>
<td>31%</td>
<td>31%</td>
<td>34%</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016

2016 Kalibri Labs

**Exhibit 41**
ADR Variations
Upper Tier

Guest-Paid, Hotel-Collected and COPE ADR

<table>
<thead>
<tr>
<th>Source</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guest-Paid ADR</td>
<td>$157</td>
<td>$164</td>
<td>$168</td>
</tr>
<tr>
<td>Hotel-Collected</td>
<td>$153</td>
<td>$160</td>
<td>$165</td>
</tr>
<tr>
<td>COPE ADR</td>
<td>$143</td>
<td>$150</td>
<td>$154</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016

2016 Kalibri Labs
Upper Tier: Average Daily Rate (ADR)
The overall ADR trend for the Upper Tier chain scales, seen in Exhibit 41, demonstrates the slowdown in rate growth for the industry as a whole.

- Given the increasing room night share of third parties it is unsurprising to see COPE ADR growing at a slower rate, 2.6%, over the past year compared to Guest-Paid and Hotel-Collected ADR, both at 2.7%, for the Upper Tier.
- Amongst the specific chain scales within the Upper Tiers, shown in Exhibit 42, Luxury has shown the weakest growth rate in terms of COPE ADR at 1.6% in 2016.
- Upscale and Upper Upscale are significantly higher for both 2015, 5.2% and 4.8% respectively, as well as 2016, 3.5% and 2.8% respectively, though like all other chain scales are down significantly in growth rate from 2015.

Digging into the Net (COPE) ADR evolution within specific sources of business for the Upper Tier, the Brand.com premium over other channels makes it clear why the major brands are investing so much in driving bookers to Brand.com.

- Exhibit 43 breaks out the COPE ADR which is the average rate after removing channel-specific, direct customer acquisition costs. In 2016, Brand.com for the Upper Tier enjoyed an 11% Net (COPE) ADR rate premium over the OTA source ($170 vs. $153).
- Voice, though declining broadly, also still enjoys a significant premium in rate (net of direct transaction costs) over other sources given the ability of agents to upsell and drive value add purchases.
- All sources of business, however, except for Group, saw notable declines in the rate of growth of the Net (COPE) ADR year over year in 2016. Brand.com still grew 1.9% in COPE ADR through June in 2016 despite the introduction of the Book Direct campaigns offering discounts throughout the industry.
- Given the reduction in the Opaque OTA business model, it comes as no surprise to see large growth in OTA COPE ADR. Opaque rates net of sales cost grew 3.4% and with less of it in the mix, COPE ADR for the overall channel would be expected to increase.
- Further, Exhibit 44 makes it clear that the Retail model has declined in terms of COPE ADR from 2015 while Merchant (Net) has shown modest growth.
- As shown in Exhibit 45, the Upper Tier has managed to contain its decline in COPE % compared to the Middle and Lower Tiers.
Detailed Analysis of Hotel Segments

Exhibit 43
COPE ADR
Upper Tier

Source of Business
ADR Net of Direct Transaction Costs

<table>
<thead>
<tr>
<th>Source</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand.com</td>
<td>$160</td>
<td>$167</td>
<td>$171</td>
</tr>
<tr>
<td>Voice</td>
<td>$174</td>
<td>$174</td>
<td>$183</td>
</tr>
<tr>
<td>Property Direct</td>
<td>$129</td>
<td>$135</td>
<td>$140</td>
</tr>
<tr>
<td>OTA</td>
<td>$139</td>
<td>$149</td>
<td>$153</td>
</tr>
<tr>
<td>GDS</td>
<td>$142</td>
<td>$148</td>
<td>$151</td>
</tr>
<tr>
<td>FIT Wholesale</td>
<td>$177</td>
<td>$179</td>
<td>$181</td>
</tr>
<tr>
<td>Group</td>
<td>$148</td>
<td>$154</td>
<td>$159</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016 | Internal Discount rates are excluded

Exhibit 44
COPE ADR
Upper Tier

OTA Agency Model
ADR Net of Direct Transaction Costs

<table>
<thead>
<tr>
<th>Source</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net (Merchant)</td>
<td>$148</td>
<td>$157</td>
<td>$159</td>
</tr>
<tr>
<td>Retail</td>
<td>$173</td>
<td>$180</td>
<td>$176</td>
</tr>
<tr>
<td>Opaque</td>
<td>$74</td>
<td>$76</td>
<td>$76</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016

2016 Kalibri Labs
Exhibit 46 shows the COPE % change for the chain scales within the Upper Tier.

- The Luxury chain scale is the primary driver of decline in 2016 for the Upper Tier with a drop of 0.2% to 90.5% in COPE% while Upper Upscale remained flat and Upscale declined only 0.1%.

- The Luxury chain scale possesses the lowest overall COPE % of any of the chain scales examined in this analysis. This is due in large part to that segment’s reliance on expensive luxury consortia, lower Brand.com penetration overall, and higher OTA share compared to most other chain scales.
Detailed Analysis of Hotel Segments

**MIDDLE TIER HOTEL PERFORMANCE**

**Middle Tier Summary: Upper Midscale Chain Scale**

Several high-level trends were evident in the performance of the Middle Tier or the Upper Midscale chain scale. This is the sole chain scale within the Middle Tier due to its unique rate and occupancy position relative to the other chain scales in this analysis.

- The Middle Tier is the only tier to see occupancy growth year over year. While modest, this 0.2% growth in occupancy coupled with a relatively mild supply increase, drove a stronger COPE RevPAR performance, up 3.2% year over year, slightly more than the Lower Tier (3.1%) and ahead of the Upper Tier (2.1%).

- The Middle Tier was significantly impacted by the industry-wide decline in the Property Direct Source of Business. This source represented 41.1% of room nights in 2014 for the tier and has now declined to 35.4% in 2016.
  - This has starkly impacted the Transient Direct-to-Indirect Ratio as not all those room nights shifted to direct channels; many went to OTAs.
  - The decline of Property Direct share has additionally driven down the COPE %, or the percentage of Guest-Paid Revenue a hotel retains after direct customer acquisition costs are paid.

- Contrasted with the Upper Tier, the Middle Tier’s COPE ADR grew more slowly than its Guest-Paid or Hotel-Collected ADR, highlighting the impact of the shift from high profit Property Direct business to more expensive OTA as the Net (COPE) ADR (after direct acquisition costs) grows more slowly than the Guest-Paid figures or those that appear on the P&L.

**Middle Tier: Demand and Occupancy**

- Compared to the other tiers and chain scales there is a stronger performance in the Middle Tier in terms of COPE RevPAR, up 3.2% in 2016 year over year. However, its Guest-Paid RevPAR was up 3.6% and it could not capture all of that value (or its COPE RevPAR would have also been 3.6%); Occupancy was up 0.2%.

- The year over year room night growth for the Middle Tier was more modest at 1.6% while overall COPE revenue was up 4.7%.

- A relatively limited growth in supply compared to the other tiers and chain scales drove much of the positive RevPAR performance. Additionally, the Middle Tier was the only tier to show a growth year over year in Voice, 1.5% in share, which contributed positively from a Profit Contribution (COPE) perspective.
**Middle Tier: Transient Direct-to-Indirect Ratio and Channel Share**

The Middle Tier channel share shift is examined using the Transient Direct-to-Indirect Ratio shown in Exhibit 29, repeated from the Upper Tier section. The Transient Direct-to-Indirect Ratio gives an immediate, high-level view of how the split between direct and indirect bookings is evolving over time.

- In 2014 there were 3.6 direct room nights for every 1 indirect room night booked at hotels in the Middle Tier and in 2016 there were only 2.9 direct room nights for every indirect room night. This decline was significantly more than that of the Upper Tier but significantly less than that of the Lower Tier.

- In large part, this is driven by the decline of the Property Direct Source of Business from 41.1% of room nights in 2014 to 35.4% in 2016. For the Upper Tier, Property Direct has not been as significant a Source of Business and for the Lower Tier, it reflects an even more significant shift.

- Driving the decline in the Transient Direct-to-Indirect Ratio was an increase in the room night shares of OTA and GDS from 2014 forward coupled with a sharp decline in Property Direct over that same period shown in Exhibit 47.

- Brand.com increased, likely benefiting at least partially due to shift from Property Direct, but it’s important to note that, across all chain scales in this analysis, the decline in Property Direct did not shift entirely to other direct channels. A portion of this shift went to OTA and GDS in addition to Brand.com. This shift is of particular note for the Middle and Lower Tiers as they began with a much higher proportion of Property Direct business.

- The decline in Property Direct business indicates that there were bookers who previously had a direct relationship with the hotel or stay brand that have now shifted to booking through third-parties. These guests represent an opportunity area for stay brands to recapture.

The OTA source has shown the largest growth rate from 2014 to 2016 for the Middle Tier among all Sources of Business with a 27.2% growth over that period. Due to the smaller base of the OTA channel, its growth of 2.4 points corresponds to a larger percentage growth. Examining the absolute points of market share added, Brand.com has nearly kept up with OTA growth with 2.2 percentage points added.
The growth and decline patterns for weekday and weekend business in the Middle Tier, as shown in Exhibits 48 and 49, are very similar.

- Of note is a decline from 2014 to 2016 in weekend Group business while weekday increased slightly.

- OTA’s weekend growth on a percentage point basis at 3.3 points was significantly higher than that of Brand.com at 2.1 points.

- Hotels are doing a better job driving additional weekday Brand.com business from the decline in Property Direct but potentially have room to grow on the weekends.
Exhibit 48
Weekday Demand Share
Middle Tier

Source of Business
% of Actualized Room Nights

2014 2015 2016

- 13.5%
+ 10.8%
+ 2.0%
+ 42.2%
+ 26.8%
+ 9.1%
+ 2.6%
+ 1.9%

Brand.com Voice Property Direct OTA GDS FIT Wholesale Group

20 months ending in June 2014, 2015 and 2016 | Weekday includes Sunday-Thursday
2016 Kalibri Labs

Exhibit 49
Weekend Demand Share
Middle Tier

Source of Business
% of Actualized Room Nights

2014 2015 2016

- 15.1%
+ 9.7%
+ 2.7%
+ 38.6%
+ 28.2%
+ 13.9%
+ 6.5%
+ 2.1%

Brand.com Voice Property Direct OTA GDS FIT Wholesale Group

12 months ending in June 2014, 2015 and 2016 | Weekend includes Friday-Saturday
2016 Kalibri Labs
The Middle Tier reflects a similar pattern in the evolution of the OTA Agency Model, illustrated in Exhibit 50, as compared to the Upper Tier as viewed in the prior section.

- Both Merchant (Net) and Retail have seen strong growth, particularly over the trailing 12 months, while Opaque has steadily declined.
- Overall OTA growth was stronger in 2016 for the Middle Tier than for the Upper Tier – which is reflected in both Merchant (Net) and Retail OTA growth.
- Opaque has declined more slowly in this Tier than in others with a drop of 17% compared to 24% in the Upper Tier.

- Out of all three tiers, the Middle Tier experienced the largest point growth in Loyalty Demand Share with a 3.8 percentage point increase in penetration from 2014 to 2016.
- The Loyalty Demand Share growth came on the back of high loyalty penetration in the Voice channel as well as sharp growth in Brand.com as shown in Exhibit 51.
- Book Direct efforts are a likely trigger for much of this growth pattern.
- A sharp contrast from the Upper Tier is in the loyalty penetration in the Group segment, which for the Middle Tier was 24% in 2016 compared to 37% for the Upper Tier. That penetration may be due to the mix of groups that book within this tier but could represent an opportunity area for Middle Tier hotels.

Exhibit 50
OTA Demand Share
Middle Tier

<table>
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<tr>
<th>Year</th>
<th>Opaque</th>
<th>Retail</th>
<th>Net (Merchant)</th>
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<tr>
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<td>1.7%</td>
<td>1.3%</td>
<td>5.8%</td>
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<tr>
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<td>1.6%</td>
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<tr>
<td>2016</td>
<td>1.4%</td>
<td>2.3%</td>
<td>7.6%</td>
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(12-months ending in June)

2016 Kalibri Labs
**Middle Tier: Average Daily Rate (ADR)**

The overall ADR trends for the Middle Tier, found in Exhibit 52, reflect the slowdown in growth in the market from an ADR perspective. Examining COPE ADR helps reflect the changing environment in terms of the mix in business and growth or decline in different sources.

- The overall COPE ADR growth for the Middle Tier outpaced that of the Upper Tier, 3.3% compared to 2.7%, but was lower than that of the Lower Tier, 3.3% compared to 3.7%.
- Most importantly, from the 12 months ending in June 2014 to the same months ending in June 2016, COPE ADR has grown 7.0% compared to 7.6% in Hotel-Collected ADR and 7.9% for Guest-Paid ADR. This is a component of the financial impact from the decline in Property Direct and increase in OTA that this tier, and the industry at large, is seeing.
- COPE ADR has grown significantly more slowly over the past several years than either Hotel-Collected or Guest-Paid ADR. The slower growth of COPE ADR indicates that channel shift and increasing customer acquisition costs are reducing the amount of revenue a hotel can retain after customer acquisition costs are paid.

- At a Source of Business level, the strongest COPE ADR growth from 2014 has occurred in the OTA and Group segments, shown in Exhibit 53.
- For OTA, this is partially a result of the agency model shift away from Opaque and toward Retail and Merchant.
- Except for Group, the rate of growth in ADR for all sources was down this year compared to previous.
- The strongest transient COPE ADR growth performers in 2016 were Brand.com at 3.0% and OTA at 4.5% meaning the rates reflected less of a rise in the acquisition costs than other channels. Much as in the Upper Tier, the Brand.com COPE ADR improved even while accounting for the discounting associated with the Book Direct campaigns.
- Within the OTA Source of Business, shown in Exhibit 54, the COPE ADR growth is driven by strong increases in Merchant (Net) as well as Opaque.
- Meanwhile, the Middle Tier’s Opaque COPE ADR growth of 12.8%, compared to 2014, is significantly higher than its overall growth, indicating that perhaps hotels in this tier are more aggressive on rate when they utilize the Opaque model while at the same time reducing its share of room nights.
Detailed Analysis of Hotel Segments

Exhibit 52
ADR Variations
Middle Tier

Guest-Paid, Hotel-Collected and COPE ADR

+ 7.9%
+ 7.6%
+ 7.0%

Guest-Paid ADR
Hotel-Collected ADR
COPE ADR

12 months ending in June 2014, 2015 and 2016
2016 Kalibri Labs

Exhibit 53
COPE ADR
Middle Tier

Source of Business
ADR Net of Direct Transaction Costs

+ 6.7%
+ 7.0%
+ 5.3%
+ 9.6%
+ 6.6%
+ 7.8%
+ 9.8%

Brand.com
Voice
Property Direct
OTA
GDS
FIT Wholesale
Group

12 months ending in June 2014, 2015 and 2016 | Internal Discount rates are excluded
2016 Kalibri Labs
Middle Tier: COPE %
The decline in Property Direct business and growth in indirect channels has negatively impacted COPE % across the industry. COPE % is useful in measuring how overall channel mix impacts the bottom-line as it measures how much Guest-Paid revenue the hotel can capture after paying direct acquisition costs.

Given its relatively high initial Property Direct source room night share, the Middle Tier would expect its COPE % to decline faster than the Upper Tier as the business shifts to higher cost channels.

In the 12 months ended June 2016 the Middle Tier had crossed over into having a lower COPE %, or profit contribution, than the Upper Tier. Exhibit 45 breaks out the COPE % change for each tier.

The Middle Tier was heavily impacted by the decline in relatively inexpensive Property Direct business that moved to OTA and other higher cost channels.

The larger brands’ efforts through their mobile apps and other outreach methods to get consumers back whom previously had booked through Property Direct may provide favorable movement back to higher profit contribution levels in the future.
Detailed Analysis of Hotel Segments

Exhibit 45
COPE %
Tiers

Contribution to Operating Profit and Expenses as % of Guest-Paid Revenue

Lower Tier | Middle Tier | Upper Tier
---|---|---
94.3% | | |
93.9% | | |
91.8% | 91.3% | 91.2%
91.5% | 91.3% | 91.0%

2014 | 2015 | 2016

12 months ending in June 2014, 2015 and 2016

Exhibit 55
RevPAR Growth
Chain Scales

RevPAR Variations
2016 % Change from 2015

Guest-Paid RevPAR | Hotel-Collected RevPAR | COPE RevPAR
---|---|---
3.8% | 3.1% | 2.6%
4.4% | 4.0% | 3.6%
3.8% | 3.6% | 3.5%
3.6% | 3.5% | 3.2%
3.1% | 3.2% | 3.0%
2.5% | 2.6% | 2.5%
0.0% | 0.0% | -0.2%

Economy | Midscale | Upper Midscale | Upscale | Upper Upscale | Luxury

12 months ending in June 2015 and 2016

2016 Kalibri Labs
LOWER TIER HOTEL PERFORMANCE

Lower Tier Summary: Midscale and Economy Chain Scales
The Lower Tier contains the Economy and Midscale chain scales. The overall performance of hotels within this tier varies significantly from that of the Middle and Upper Tiers in terms of demand share mix, COPE % and COPE ADR though macro-level trends are similar across the three.

The COPE RevPAR growth in 2016 for the Lower Tier, 3.1%, was a full percentage point below the Guest-Paid RevPAR growth over the same period. This means that the decline in Property Direct room night share coupled with an increase in OTA and flat growth in Brand.com led to lower Revenue Capture, meaning a reduced ability for the hotels to capture the added value in the market.

However, looking at a chain scale level, the Midscale chain scale showed the strongest COPE RevPAR growth, 3.6%, from the 12 months ended June 2015 to the same period in 2016 of any of the chain scales in this analysis, meaning that the hotels in that chain scale grew its net COPE revenue more than other chain scales. However, given its Guest-Paid revenue growth of a significant 4.4%, it turned over a lot of the value to third parties, or it’s COPE RevPAR growth would have tracked more closely with the Guest-Paid growth.

Unlike the other tiers in this analysis, the Opaque OTA model has continued to grow in the Lower Tier in 2016 compared to 2015. This is driven almost entirely by growth in the Economy chain scale while Midscale remained flat in this share metric over that same period.

• While much of the industry is shifting away from the Opaque model, this model is still strong in some chain scales

The difference in growth between Guest-Paid ADR and COPE ADR was most significant in the Lower Tier compared to the other tiers. While this difference was 0.4 and 0.1 percentage points for the Middle and Upper Tiers respectively, it was a full 1.0 percentage point for the Lower Tier.

• The Lower Tier grew Guest-Paid ADR 4.2% year over year and only grew COPE ADR 3.2% year over year. This means guests were willing to pay much more compared to the previous year but hotels were only able to capture a portion of that additional Guest-Paid Revenue. The hotels left a full point of ADR growth on the table in the form of customer acquisition costs.

Exhibit 28 is repeated from the Upper Tier section.
Detailed Analysis of Hotel Segments

Exhibit 56
Occupancy %

Lower Tier Chain Scales
- Economy
- Midscale

2014: 58.9%
2015: 59.4%
2016: 58.7%

12 months ending in June 2014, 2015 and 2016

Exhibit 29
Direct: Indirect ratio
Tiers

Transient Segments
Actualized Room Nights
- Lower Tier
- Middle Tier
- Upper Tier

2014: 5.9
2015: 5.3
2016: 4.0

- 33%
- 19%
- 8%

12 months ending in June 2014, 2015 and 2016

2016 Kalibri Labs
Lower Tier: Demand and Occupancy
- The Lower Tier experienced the slowest growth of the three tiers in terms of overall room nights as well as in COPE Revenue. COPE Revenue grew somewhat more slowly than the other hotel segments at 3.8% year over year, compared to 4.7% for the Middle Tier and 5.2% for the Upper Tier.
- Despite the relative stagnancy in absolute room night growth for the Lower Tier compared to the rest of the industry, the Lower Tier experienced the strongest Guest-Paid and Hotel-Collected RevPAR growth among the tiers, shown in Exhibit 28.
- The chain scales within this tier differed in their occupancy performance in the most recent year as evidenced in Exhibit 56. While Midscale showed by far the largest growth in occupancy year over year, a full percentage point from 59.3% to 60.3%, Economy declined from 59.4% to 58.7% leaving the overall Tier roughly flat.

Lower Tier: Transient Direct-to-Indirect Ratio and Channel Share
The decline in the Transient Direct-to-Indirect Ratio, shown in Exhibit 29, is most pronounced in the Lower Tier though it still retains the highest ratio amongst the tiers examined. This means that there are still more direct room nights for each indirect room night in absolute terms but the ratio is declining more quickly for the Lower Tier than for the others.

Both Economy and Midscale have declined significantly in terms of the Direct-to-Indirect Ratio from 2014 and even more sharply in the 12 months ended June 2015 when compared to the same period in 2016.
- Much like the Middle Tier, a significant portion of the Direct-to-Indirect Ratio decline is due to falling Property Direct room night share. This effect is more pronounced in the Lower Tier given its higher starting share of Property Direct. Exhibit 57 breaks out the room night demand share by source for the Lower Tier.
- However, unlike the trends in both the Middle Tier and the Upper tier, little of this Property Direct decline appears to be shifting to Brand.com.
- The Lower Tier shows a larger increase in Voice business from 2014 than the other Tiers. The flatness in Brand.com and sharp growth in OTA are significant contributors to changes in the Direct-to-Indirect Ratio as well as overall decline in COPE % for the Tier. The changes in demand share by Source of Business are similar across the Economy and Midscale chain scales.
Detailed Analysis of Hotel Segments

Exhibit 37
Loyalty Demand

Exhibit 58
OTA Demand Share
Lower Tier

12 months ending in June 2014, 2015 and 2016

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Exhibit 37 is repeated from the Upper Tier section.
A factor that is intertwined with relatively low Brand.com room night share in the Lower Tier is the relatively low penetration of loyalty programs in these chain scales, shown in Exhibit 37.

- The Lower Tier has a loyalty demand percentage of 24.7% in 2016 up from 21.1% in 2014. This means that 24.7% of actualized room nights in this tier were from loyalty program members, less than half the penetration of the Middle and Upper Tiers, but growing strongly.
- While it is likely a factor of the type of business available at the rate level of the Lower Tier, the loyalty demand share still represents an opportunity area. Many Lower tier brands are exploring how to grow Brand.com room night share through increasing loyalty demand share.

The Lower Tier has shown similar trends to the other tiers in terms of OTA agency model shift, shown in Exhibit 58.

- Merchant (Net) has continued to grow and Retail has accelerated with the rapid expansion of Booking.com and Expedia Hotel-Collect.
- The main difference is that, unlike what is seen in other tiers, Opaque has continued to grow in 2016, largely due to growth of 6.4% in 2016 in the Economy chain scale and flat growth over the same 12 months in the Midscale chain scale.

### Lower Tier: Average Daily Rate (ADR)

On a positive note, the Lower Tier has shown the strongest overall ADR growth of any Tier. However, the hotels were not able to take full advantage of the uptick in Guest-Paid Revenue.

- The channel shift to more costly channels caused the profit contribution (COPE ADR) for the tier to grow only 3.2% year over year while the amount paid by the guests (Guest-Paid ADR) grew 4.2% year over year as demonstrated in Exhibit 59.
- This differential of a full percentage point between Guest-Paid ADR growth and COPE ADR growth between 2015-2016 compares to 0.4 points for the Middle Tier and 0.1 points for the Upper Tier indicating that Lower Tier hotels grew their COPE ADR significantly slower than their Guest-Paid ADR compared to the other Tiers.
- Essentially, guests were willing to pay more, but hotels had to pay a premium to get that revenue and could not net a higher profit contribution as a result.

---

### Exhibit 59
ADR Variations

**Lower Tier**

- **Guest-Paid ADR**
- **Hotel-Collect ADR**
- **COPE ADR**

*12 months ending in June 2014, 2015 and 2016*
Detailed Analysis of Hotel Segments

Exhibit 60
COPE ADR
Lower Tier

Source of Business
ADR Net of Direct Transaction Costs

<table>
<thead>
<tr>
<th>Source</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand.com</td>
<td>$70</td>
<td>$73</td>
<td>$75</td>
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<tr>
<td>Voice</td>
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<td>$65</td>
<td>$66</td>
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<td>Property Direct</td>
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<td>OTA</td>
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<td>GDS</td>
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<tr>
<td>FIT Wholesale</td>
<td>$61</td>
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<td>$68</td>
</tr>
<tr>
<td>Group</td>
<td>$65</td>
<td>$67</td>
<td>$70</td>
</tr>
</tbody>
</table>

12 months ending in June 2014, 2015 and 2016 | Internal Discount rates are excluded
2016 Kalibri Labs

Exhibit 61
COPE ADR
Lower Tier

OTA Agency Model
ADR Net of Direct Transaction Costs

<table>
<thead>
<tr>
<th>Source</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
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<tbody>
<tr>
<td>Net (Merchant)</td>
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<td>Retail</td>
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<tr>
<td>Opaque</td>
<td>$44</td>
<td>$47</td>
<td>$50</td>
</tr>
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12 months ending in June 2014, 2015 and 2016
2016 Kalibri Labs
The Lower Tier hotels paid a premium to get additional revenue compared to previous years, and it was considerably more than Upper and Middle Tier hotels.

The strongest COPE ADR growth for the Lower Tier over the past three years has occurred in the OTA channel which increased 18% over that period, shown in Exhibit 60, despite the increase in Opaque business.

The Voice channel has seen an increase both in share from 2014 to 2016, from 5.6% to 7.1% of room nights, and a 7.3% increase in COPE ADR. This share increase bucks the trend of the industry and the COPE ADR increase is the highest in the Voice Source of Business across all hotel tiers.

The driver of the OTA COPE ADR increase was primarily the jump in Merchant (Net) model business along with an increase in Opaque COPE ADR. Exhibit 61 illustrates COPE ADR by OTA Agency Model for the Lower Tier.

The Retail OTA model has been flat in growth from an ADR perspective from 2014-2016 though still outperforms Merchant and Opaque models with the highest COPE ADR in absolute terms.

The Lower Tier COPE % has experienced the sharpest decline amongst the tiers examined, shown in Exhibit 45, but much like the Direct-to-Indirect Ratio, it began at a much higher base and remains the highest figure.

This drop in COPE % is due to the sharp decline in Property Direct business coupled with increases in OTA share.

CONCLUSION

The changing and increasingly digital marketplace in the hotel industry affects different segments in different ways. There are broad trends of declining or flat room night shares coming through legacy channels, Property Direct and Voice, along with a marked shift in how the OTA channel is booked. The increases in Brand.com business in certain tiers and chain scales show the impact of loyalty focused marketing campaigns while the dramatic growth in OTA business highlights the continued efforts that hotel brands will need to undertake in order to stay ahead.

Part 3 of Demystifying the Digital Marketplace will focus on the concrete actions that hoteliers can take to improve a hotel’s Revenue Capture and its absolute Net Revenue. With the information in this analysis at their disposal and with other new industry tools, revenue strategists at hotels can better direct their efforts towards generating sustainable, profitable business.
Thank you for reading Part 2 of *Demystifying the Digital Marketplace: Spotlight on the Hospitality Industry*. Part 1 focused on the context and trends within the digital marketplace of the hospitality industry. Part 2 reviewed Hotel Performance metrics, incorporating data from over 25,000 hotels in North America, and Part 3 will explore how hotels can adapt and take action on opportunities in the dynamic digital marketplace. Here is what’s coming next:

**Part 3 – Taking Action**

Utilizing industry context from Part 1 as well as hotel performance metrics from Part 2, Part 3 will provide examples and guidance on the types of analysis, tools and actions hotels can implement to evaluate and drive revenue performance. Examples and case studies will be shared on ways that data insights can be deployed to help hotels target and achieve their Optimal Business Mix, as well as specific techniques and approaches to improve profit contribution. To convey action at the industry level, Part 3 will also contain a roundup of legislative action around issues arising from the explosive and dynamic growth of the digital marketplace.
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*Demystifying the Digital Marketplace: Spotlight on the Hospitality Industry*

HAMA is an association of professional individuals who are dedicated to the enhancement of hotel and hospitality asset values. Our business is to provide intense semi-annual forums and industry communications to fulfill the purpose of the organization. HAMA promotes ethical standards of conduct and mutual respect among members and the hospitality industry. Our membership roster includes representation from insurance companies, individual owners, REITS, wall street players, national pension funds and pension fund advisors—all dedicated to the hospitality industry.

HAMA members are involved in asset management, acquisition, financing and disposition of hotels and resorts and are directly responsible for making decisions concerning capital investments, renovations, asset repositioning, operational policies and brand and management selection. HAMA consists of more than 200 members across the United States and through international affiliates. Its membership in the United States represents more than 3,500 hotels and resorts across every major brand, accounting for more than 775,000 hotel rooms, 250,000 employees, $40 billion in annual revenue and $3 billion in capital expenditures.
ABOUT HFTP
Hospitality Financial and Technology Professionals (HFTP®) is a global nonprofit hospitality association that uniquely understands the hospitality finance and technology industry’s practices and challenges. HFTP has 5,000 members and several thousand stakeholders across the globe. The association assists its members in finding solutions to industry problems more efficiently than any organization via its expert networks, research, resources, certification programs and conferences such as HITEC®. The association is the ONLY nonprofit producing hospitality financial and technology conferences on a global level.

CONNECTIONS
HFTP provides its members and stakeholders a variety of outlets and opportunities to connect with professionals with similar professional interests and concerns.

Conferences — Year-round, HFTP produces a variety of face-to-face events where attendees can network.

Online — The Community@HFTP is a discussion platform where members pass information back and forth.

Chapters — Geographically-based, chapters meet frequently for education and to connect on a local level.

PROFESSIONAL DEVELOPMENT
HFTP is the only nonprofit that offers hospitality financial and technology conferences on a global level. Offered year-round, the programs are presented by industry thought leaders in professional development, best practices and skills training.

HFTP also offers a regular schedule of webinars via its ProLinks program. These are available live, allowing participants to interact with the speaker and other attendees. Webinars are also archived for later reference.

New Events
HITEC Amsterdam • Amsterdam, The Netherlands
HITEC Dubai • Dubai, UAE
New Digital Learning Days • Full day webinars with specific focus on Europe, Asia and club technology

CERTIFICATION
The Certified Hospitality Accountant Executive (CHAE) is the industry designation showcasing members competency in the area of accounting. Unlike other technology designations, the Certified Hospitality Technology Professional (CHTP) shows a dedication to hospitality and technology. Active CHAE and CHTP designees have reported higher salaries and various career advancement opportunities.

RESEARCH AND RESOURCES
HFTP supports a variety of professional resources, research reports and common practice guides on a variety of finance and technology subjects.

The HFTP Americas and Asia Research Centers not only provide comprehensive research, studies and reports on a variety of topics such as mobile payments, data security and accounts management; but, members can request their own research projects to meet their needs.

Online Information

PineappleSearch.com is a hospitality-specific search site that narrows results to industry relevant information.

HITEC Bytes aggregates the most current hospitality technology news for members to browse through.

HFTP News keeps members in touch with association updates, blog posts and content produced by HFTP.
Demystifying the Digital Marketplace: Spotlight on the Hospitality Industry continues a long tradition of publishing excellence from the HSMAI Foundation. The Foundation was established in 1983 to serve as the research and educational arm of the Hospitality Sales and Marketing Association International. The Foundation’s mission is to develop knowledge and insights for the future to fuel sales, inspire marketing and optimize revenue.

In recent years, the HSMAI Foundation has published reports and research on the most timely and critical topics, including:

- **Second Edition: The Evolving Dynamics of Revenue Management: A Comprehensive Revenue Optimization Road Map for Hotel Owners, Operators and Practitioners**

- **The Evolution of Sales**

- **Leadership Insights**

- **HSMAI Foundation Reports:**
  - Hotel Revenue Managers Incentives Practice Research
  - Hotel Sales Incentive Practice Research

The HSMAI Foundation today is focused on insights, research, and scholarship. To deliver relevant resources to leaders in sales, marketing, and revenue management, the HSMAI Foundation has partnered with organizations and companies such as AH&LA, STR, American Express, TravelClick, Pegasus, Vizergy, U.S. Travel Association, and others to create reports, 25 association white papers, scholarship programs, and an online clearinghouse.

The HSMAI Foundation wishes to thank all of the industry leaders from hotels and brands that helped in collecting the data that made this comprehensive analysis possible. In return, in the months and years ahead, the HSMAI Foundation will be offering even more insights into how hotel sales, marketing and revenue management professionals can apply the findings of this important study to their businesses, with the goal of finding the optimal channel mix for their properties.

**PLEASE VISIT**
www.hsmaifoundation.org

to learn more about the HSMAI Foundation and to tap into all of the insights, research, and scholarship we have to offer.
The IHG Owners Association represents the interests of owners and operators of more than 3,500 InterContinental Hotels Group® (IHG) properties in the United States, Africa, Australasia, Canada, Europe, Latin America, Mexico and the Middle East.

Established by Holiday Inn founder Kemmons Wilson in 1955, the Association is committed to representing our members by being their voice with IHG and communicating on their behalf about issues that affect them and the hotel industry as a whole. The Association also provides our owners with opportunities and resources to better educate themselves on topics that will help them and their businesses.

One resource that we truly feel is beneficial to our owners is the Demystifying the Digital Marketplace: Spotlight on the Hospitality Industry. The IHG Owners Association contributed to this report years ago. Our continuous support is a reflection of the Association’s belief in the report’s findings and how these discoveries can be beneficial to both our members and to all stakeholders in the hospitality industry.

We are confident and hopeful that this report will help spur conversation and enlighten readers. And, more importantly, equip all hotel owners and operators with the necessary tools that they need to better understand distribution trends and other important components that will help to ultimately increase their ROI.

Best Regards,

Don Berg
CEO, IHG Owners Association

Steve Ehrhardt
2016 Chair, IHG Owners Association
Cindy Estis Green’s career began in corporate marketing and senior operations roles for Hilton International. After founding the data mining consultancy, Driving Revenue, and selling it to Pegasus Solutions, Ms. Green spent twelve years as managing partner of The Estis Group providing strategic marketing consulting to the hospitality industry. Co-author of the groundbreaking 2012 study *Distribution Channel Analysis: A Guide for Hotels* and the newly released 2017 *Demystifying the Digital Marketplace: Spotlight on the Hospitality Industry*, Estis Green has been honored as one of the 25 Extraordinary Minds in Sales and Marketing by HSMAI, the Hospitality Sales & Marketing Association International; was inducted into the prestigious Hospitality Technology Hall of Fame; and named as one of Cornell University’s 90 Influential Hotelies. She is currently leads the AH&LA Consumer Innovation Forum, the European Hotel Forum, and holds a board seat for The Knowland Group as well as the Hospitality Financial and Technology Professionals association (HFTP). Ms. Estis Green launched Kalibri Labs in 2012, a firm providing a next generation benchmarking platform to evaluate hotel revenue performance. Using innovative big data techniques, Kalibri Labs helps hotels manage the cost of customer acquisition and optimize profit contribution. Estis Green holds a BS degree from Cornell University and an MBA from The American University.

Mark Lomanno is a Partner and Senior Advisor at Kalibri Labs. In addition to his role at Kalibri Labs he also advises several start-up and venture capital firms in the hospitality and data space as a member of the Board of Directors and Advisors providing strategic direction and building industry relationships. Lomanno is the former President and CEO of Smith Travel Research (STR). Under his fifteen years of leadership, the company grew from a domestic U.S. firm to the most respected name in global hotel benchmarking. While at STR, he co-authored the 2012 study *Distribution Channel Analysis: A Guide for Hotels* with Cindy Estis Green.

Lomanno serves on the advisory board and is a Research Fellow at the Center for Hospitality Research at Cornell University and University of Delaware’s school of Hotel, Restaurant and Institutional management, is an active member in the Hotel Development Council of the Urban Land Institute and is a named Conti Professor at Pennsylvania State University. Lomanno also serves on the advisory board of The School of Tourism & Hospitality Management at Temple University, where he teaches a graduate level course “New Media and Distribution.” Lomanno holds a MS in Marketing from LaSalle University and an MBA from Temple University.

Matt Carrier is the Director of Client Engagement at Kalibri Labs. He spent five years in the hospitality distribution and revenue strategy space. With that experience, Carrier is inspired by the rapid evolution in this area of the industry and by the opportunity to drive change and support hotels in improving their performance.

Prior to joining Kalibri Labs, Carrier spent three years as a part of Marriott’s Channel Strategy and Distribution team working on a variety of initiatives in the online hotel distribution space. These included both industry-wide efforts and product lines within Marriott. Carrier had responsibility for reporting, marketing and merchandising for Marriott’s vacation packaging vertical, collaborating across internal teams on industry-wide projects and working with the distribution team to vet potential new partners. Carrier holds a BS from the Cornell University School of Hotel Administration.