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# Total Hotel Revenue Management: A Strategic Profit Perspective

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**Abstract**

Hospitality firms are expanding traditional revenue management (RM) practice to focus on customer value and strategic profit management. Participants in series of semi-structured interviews suggested that revenue management is moving away from a sole focus on top-line rooms revenue toward a bottom-line orientation focused on the customer. Thus, RM will expand to multiple revenue sources and encompass a multi-channel demand management approach. The interviews with sixteen senior hotel leaders, RM vendors, and solution providers highlighted the importance of profit, rather than just revenue, given rising distribution and variable costs. Despite the attraction of other revenue and profit sources, such as F&B, spas, and function space, the participants noted that expanding RM to those areas involves complexities not found in the rooms division. Ideally, hoteliers seek to assess the value of each customer's patronage and develop a specific relationship with each customer. With changes envisioned by these hotel leaders, the practice of revenue management will evolve into the more accurate and expansive notion of strategic profit management.

**Disciplines**

Hospitality Administration and Management

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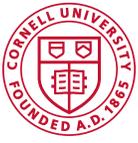
# Total Hotel Revenue Management:

## A Strategic Profit Perspective

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## EXECUTIVE SUMMARY

Hospitality firms are expanding traditional revenue management (RM) practice to focus on customer value and strategic profit management. Participants in series of semi-structured interviews suggested that revenue management is moving away from a sole focus on top-line rooms revenue toward a bottom-line orientation focused on the customer. Thus, RM will expand to multiple revenue sources and encompass a multi-channel demand management approach. The interviews with sixteen senior hotel leaders, RM vendors, and solution providers highlighted the importance of profit, rather than just revenue, given rising distribution and variable costs. Despite the attraction of other revenue and profit sources, such as F&B, spas, and function space, the participants noted that expanding RM to those areas involves complexities not found in the rooms division. Ideally, hoteliers seek to assess the value of each customer's patronage and develop a specific relationship with each customer. With changes envisioned by these hotel leaders, the practice of revenue management will evolve into the more accurate and expansive notion of strategic profit management.

**Keywords**: Revenue Management, Strategic Profit Management, Non-Room Revenue Streams, Customer Relationship Management, Value Creation, Industry Experts

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Traditional hotel revenue management (RM) is in transition from being chiefly a stand-alone, tactical technique for managing rooms inventory to adopting a strategic, customer-centric approach to demand creation and profit maximization.[1] While academics have suggested for some time that RM should be applied to non-room revenue sources, the industry is now moving toward extending the scope of RM practice beyond the rooms division.[2] However, given that some revenue streams, such as restaurants, have high variable costs associated with them, Thompson, for one, has called for a shift in focus from revenue to profitability.[3] This suggests that the future will require RM to consider both the revenue and costs associated with other revenue streams as it expands its focus beyond the management of rooms revenue to a more complete profit-based approach.[4]

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[1] Cross, R.G., J.A. Higbie, and D.Q. Cross. 2009. "Revenue management's renaissance: A rebirth of the art and science of profitable revenue generation." *Cornell Hospitality Quarterly* 50 (1): 58-81; and Noone, B., K. A. McGuire, and K. V. Rohlfs. 2011. "Social media meets hotel revenue management: Opportunities, issues, and unanswered questions." *Journal of Revenue and Pricing Management* 10 (4): 293-305.

[2] Kimes, S. E. R. B. Chase, S. Choi, P. Y. Lee, and E. N. Ngonzi. 1998. "Restaurant revenue management: Applying yield management to the restaurant industry." *Cornell Hotel and Restaurant Administration Quarterly* 39 (3): 32-39; Kimes, S. E., and K. A. McGuire. 2001. "Function-space revenue management: A case study from Singapore." *Cornell Hotel and Restaurant Administration Quarterly* 42 (6): 33-46; Kimes, S. E., and L. W. Schruben. 2002. "Golf course revenue management: A study of tee time intervals." *Journal of Revenue and Pricing Management* 1 (2): 111-120; and Licata, J. W., and A. W. Tiger. 2010. "Revenue management in the golf industry: Focus on throughput and consumer benefits." *Journal of Hospitality Marketing & Management*. 19: 480-502.

[3] Thompson, G. M. 2010. "Restaurant profitability management: The evolution of restaurant revenue management." *Cornell Hospitality Quarterly* 51 (3): 308-322.

[4] Kimes found a similar expectation in a recent survey of RM practitioners. See: Sheryl E. Kimes, "The Future of Hotel Revenue Management," *Cornell Hospitality Report*, Vol. 17, No. 1 (2017) Cornell University Center for Hospitality Research.

The abilities to understand total customer contribution over time and to optimize price and inventory availability for customers based on estimates of their longer-term profit potential have been recognized as a future milestone for RM.[5] While price optimization solutions are currently centered around pricing rooms inventory,[6] a diverse literature within RM has surfaced to clarify the role of the consumer. This customer-centric dimension of RM has been addressed in various forms, including the integration of customer relationship management into the RM process,[7] and the increasing importance of demand management,[8] customer-value based RM,[9] and customer-centric RM.[10]

The need to balance short-term revenue maximization with long-term customer development is driving change in how the RM function collaborates with other functional units, including operations and marketing.[11] Indeed, a number of researchers have called for the integration of marketing, sales, and channel management to facilitate the development of differentiation strategies that can assure longer-term competitive advantage.[12] This call within RM is consistent with a strategic management perspective that emphasizes developing a long-term strategy to provide guidance for the preparation of short-term plans and integrate functional plans into an overall scheme for the organization.[13] New capabilities will be needed as the industry shifts focus from rooms inventory management to the complex management of a hotel's entire revenue stream, customer-based pricing, and long-term customer value creation. These include technological support for integrated decision making and data sharing; advanced interpersonal, analytical, leadership, and communication skills; and the development of integrated functional strategies that support profit maximization.

In this paper, we explore the shifting competitive landscape as viewed by sixteen of the hotel industry's leading senior RM managers. From these interviews, we gain a first-hand understanding of the evolving nature of the field and its shift from the optimization of room revenue to a strategic and multi-disciplinary domain. In conducting this study, we seek to share the voices from the field as they reflect on the ongoing evolution of hotel RM and provide insights.

## Study Method

We conducted semi-structured, in-depth telephone interviews with sixteen senior RM leaders in the industry, representing some of the largest international hotel chains (e.g., Marriott and Hilton) and leading systems and analytics vendors in the hotel RM space (e.g., IDeaS and Duetto). Indeed, it is meaningful to note that over 2.6 million rooms or approximately 34 percent of the global branded hotels' room supply is controlled by the senior leaders we interviewed for this study. Twelve of the sixteen interviewees hold leadership positions in hotel companies, while the remainder are CEOs and founders of their own firms or executive directors and directors of vendor data analytics enterprises. Exhibit 1 lists the study participants who did not wish to remain anonymous.[14]

The executive leadership positions held by the study's participants enabled them to speak as strategists who are involved in devising corporate RM philosophy, as well as implementing strategic initiatives surrounding RM practices and solutions. The mix of companies in this sample enabled us to view any variability in the scope and focus of RM efforts by company size and segment (e.g., luxury full-service properties versus limited-service hotels). Additionally, all of the hotel companies represented in the study have a global reach, allowing us to acknowledge potential differences in RM practices

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[5] Cross, R. G., J. A. Higbie, and Z. N. Cross. 2011. "Milestones in the application of analytical pricing and revenue management." *Journal of Revenue and Pricing Management* 10: 8-18.

[6] See, for example: Koushik, D., Higbie, J. A. and Eister, C. 2012. "Retail price optimization at intercontinental hotels group." *Interfaces* 42(1): 45-57; and Pekgün, P., Menich, R. P., Acharya, S., Finch, P. G., Deschamps, F., Mallery, K. and Fuller, J. 2013. "Carlson Rezidor hotel group maximizes revenue through improved demand management and price optimization." *Interfaces* 43 (1): 21-36.

[7] See, for example: Belobaba, P. B. 2002. "Back to the future? Directions for revenue management." *Journal of Revenue and Pricing Management* 1 (1): 87-89; Dickinson, C. B. 2001. "CRM-enhanced revenue management in the hospitality industry." *Hospitality Upgrade* Summer 136-138; Jonas, D. 2001. "Carriers melding revenue management and CRM systems." *Business Travel News* March 18-19; Noone, B.M., S. E. Kimes, and L. M. Renaghan. 2003. "Integrating customer relationship management and revenue management: A hotel perspective." *Journal of Revenue and Price Management* 2 (1): 7-21; and Vaeztehrani, A., Modarres, M., & Aref, S. 2015. "Developing an integrated revenue management and customer relationship management approach in the hotel industry." *Journal of Revenue & Pricing Management*, 14(2), 97-119.

[8] Anderson, C. K., and B. Carroll. 2007. "Demand management: Beyond revenue management." *Journal of Revenue and Pricing Management* 6 (4): 260-263.

[9] Von Martens, T., and A. Hilbert. 2011. "Customer-value-based revenue management." *Journal of Revenue and Pricing Management* 10: 87-98.

[10] Cross, R. G., and A. Dixit. 2005. "Customer-centric pricing: The surprising secret for profitability." *Business Horizons* 48 (6): 483-491; and Vinod, B. 2008. "The continuing evolution: Customer-centric revenue management." *Journal of Revenue and Pricing Management* 7: 27-39.

[11] Cross *et al.*, 2009.

[12] Cross *et al.*, 2009; and Noone *et al.*, 2011.

[13] Enz, C.A. 2010. *Hospitality Strategic Management: Concepts and Cases*, 2nd ed. Wiley Publishing, Hoboken; and Enz, C.A. 2012. "Strategies for the Implementation of Service Innovations." *Cornell Hospitality Quarterly* 53 (2): 187-195.

[14] We have included ideas from the two anonymous participants without attribution.

Exhibit 1

## Study participant profiles

| Participant Name | Title | Company |
|---|---|---|
| Marco Benvenuti | Co-founder and Chief Analytics and Product Officer | Duetto |
| Greg Cross | Senior Vice President of Revenue Management | Hyatt Hotels Corporation |
| Kathleen Cullen | Senior Vice President of Revenue and Distribution | Commune Hotels + Resorts |
| Craig Eister | Senior Vice President of Global Revenue Management and Systems | InterContinental Hotels Group |
| Siv Forlie | Vice President of Revenue Management | Shangri-La International Hotel Management Ltd. |
| Cindy Estis Green | Co-founder and CEO | Kalibri Labs |
| Jeannette Ho | Vice President of Revenue Management and Analytics | FRHI Hotels & Resorts |
| Sharon Hormby | Senior Director of Total Yield Systems, Global Revenue Management | Marriott International |
| Puneet Mahindroo | Corporate Director of Revenue Management, Asia Pacific | Four Seasons Hotels and Resorts |
| Kelly McGuire | Vice President, Advanced Analytics | Wyndham Destination Network |
| Mark Molinari | Corporate Vice President of Revenue Optimization, Marketing Performance, and Strategic Initiatives | Las Vegas Sands Corp. |
| James Ruttley | Vice President of Client Services | IDeaS Revenue Solutions |
| Peter Van Allen | Director of Non-Room Pricing | Hilton Worldwide |
| David Warman | Vice President of Revenue Management and Worldwide Reservations | Four Seasons Hotels and Resorts |

across different geographic areas. On the vendor side, the study's participants represent companies that have demonstrated progressive and innovative approaches to different aspects of the RM problem, and capture both off-the-shelf and custom RM solutions.

The average duration of the interviews conducted with participants was one hour. The interview comprised a set of questions designed to capture (1) participants' perceptions of the scope of total RM; (2) initiatives that are currently in place to support the application of RM to non-room revenue streams; (3) RM initiatives that are currently in place to support a customer value focus; (4) challenges to the implementation of current initiatives; and (5) the support system in place to support initiatives including organizational culture, structure, and human capital.

Interviews were recorded, transcribed, and sent to participants for review, resulting in 359 pages of interview comments (120,431 words). We then conducted a content analysis whereby we first read participants' responses to obtain a feel for the content. Next, guided by the interview questions, we developed a code list consisting of themes, sub themes, and inter-related themes identified by participants. Two independent raters reviewed and coded the data.[15] The themes identified in the qualitative

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[15] Inter-rater reliability was acceptable (Cohen's k = .91).

data were non-room revenue, customer value creation, data use, technology, operating structures, and employee development. To strengthen the validity of the themes generated through our content analysis, ensure that responses were adequately represented, and uncover any ideas not captured through our initial content analysis, we used the count function and coding process in Atlas.ti 7, a qualitative software tool designed to assist in analyzing large bodies of textual data. This tool searched the transcripts for each theme identified through our multi-rater content analysis, enabling us to locate all quotations within the transcribed documents that used key word families. In this report, we share the themes that emerged from our interviews about what companies are doing to move toward strategic profit management.

## Observations from the Field

**Defining total hotel revenue management**. Total hotel revenue management (THRM) includes consideration of multiple revenue sources, a deep understanding of customer value, and a shift from top-line metrics to bottom-line measures to take into consideration distribution and operating costs (see Exhibit 2). In that context, Craig Eister, senior vice president of global revenue management and systems for the InterContinental Hotels Group (IHG), said his company's approach to THRM comprises three components: (1) looking beyond rooms to the applica-

**Defining total hotel revenue management**

"So traditional RM has been all about really understanding the money that a room can make. And now we're expanding that to think about where it is sold and the channel that's sold and the costs associated, so it's about profit and not just rooms. So rather than just thinking about transient room revenue, we're expanding that to think about all segments, all products that we're selling, and about profit rather than revenue."—**Craig Eister**, *InterContinental Hotels Group*

"Hotels are not just rooms anymore," she stated, adding that hotels in the luxury segment build a stronger brand reputation, and are more successful, if they have great food and beverage (F&B) concepts and have the function space capacity to cater to profitable high-end events. She also noted that, in these types of hotels, spa, golf, and retail become increasingly important, highlighting the revenue and profit contribution that non-room revenue streams can make: ."These ancillary revenue streams become increasingly significant, which is why now we have enough demand to innovate with industry partners, and work internally to invest in systems, processes, and people."
—**Jeannette Ho**, *FRHI Hotels & Resorts*

"I think the holy grail of THRM is to better meet the total needs of the customer, thereby capturing a higher share of the customer's wallet in the most profitable way possible. At the same time, managing inventory. It's sleeping rooms and meeting space, and it could also be time spent or money spent in a casino. It could include food and beverage outlets, it could include spa, and golf, and ski slopes, beach—anywhere that we can inventory something and sell something to our guests. So there's the revenue and profit side, there's the inventory side, and there's the total customer side."—**Sharon Hormby**, *Marriott International*

"I view THRM as the application of RM principles and tools across each revenue center of the business—rooms, function space, catering, restaurant, or spa—taking into account the total profit contribution of each of these major revenue centers. When applying THRM, total profit contribution and customer lifetime value across all revenue centers should be considered."—**David Warman**, *Four Seasons Hotels and Resorts*

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tion of RM principles to other revenue streams, primarily food and beverage and function space; **(2)** building more intelligence around each customer segment and applying knowledge to those segments; and **(3)** viewing RM from a profit perspective, as well as a revenue perspective.

## Non-Room Sources of Revenue

All of the industry leaders we interviewed believed that the future of RM was shifting to a focus on multiple hotel revenue streams, including restaurants, function space, catering, spas, and golf. Nine of the eleven hotel firms represented in this study have initiatives addressing function space RM, and IDeaS Revenue Solutions launched its first-to-market function space RM solution in 2014. Six of the hotel companies are engaged in restaurant RM initiatives, while three hotel company participants mentioned spa or golf applications. On the vendor side, there has also been some customized RM solution development, including automated RM solutions for cabana use and hotel entertainment ticket pricing.

While participants in the study indicated a strong interest in non-rooms RM initiatives they noted that the presence of such practices at the individual hotel level is a function of the size of the hotel's non-rooms operations

and their associated revenue contribution. Hotel companies are investing in a more systematic RM implementation in hotels where the amount of real estate dedicated to a non-rooms revenue stream, along with the revenue potential of that revenue stream, is significant. The luxury segment appears to be leading the way in the application of RM practices and processes to non-room revenue streams. However, a one-size-fits-all approach to RM for non-room revenue is not advocated. Mark Molinari, corporate vice president of revenue optimization, marketing performance, and strategic initiatives for Las Vegas Sands Corp., provided the example of a meeting space optimization project that was limited specifically to Sands properties in the Las Vegas market. This initiative, designed to maximize the availability of meeting rooms, was spurred by a lack of space availability to meet the strong demand for meeting rooms in the Las Vegas market, a problem not shared by their properties in other markets.

Jeannette Ho described the restaurant RM program at FRHI Hotels & Resorts, where the focus has been on demand management, understanding revenue per available seat hour (RevPASH), table mix, menu design, menu engineering, and optimizing server performance and pricing (based on demand rather than just cost-plus). Using

## Non-room sources of revenue

**F&B RM at FHRI.** "This program brings the revenue manager together with the F&B manager, getting them to understand general RM concepts, but also how to apply them within our restaurants. Before, this would have been too cumbersome for any restaurant to see the analysis for themselves. The biggest win, apart from seeing the revenue lift, has really been the mindset change for our F&B teams. They find it interesting and fun, it's the first time they've seen their data in such an accessible format, the first time they know how they [and their strategies to build revenue] are performing in real time. I think it's encouraged more people to think out of the box and be creative in trying new initiatives." —*Jeannette Ho*, FRHI Hotels & Resorts

**Non-room forecasting at Marriott.** "It used to be that culinary had their forecast, housekeeping had their forecast, revenue had their forecast, catering had theirs, and finance had theirs—everybody was moving in kind of the same direction, but you would find conflicts and discrepancies. So people weren't driving strategies from the same platform. Now, there is a single version of the future that drives everything."—*Sharon Hormby*, Marriott International

**Seasonality at Shangri-La.** "F&B still forecasts their F&B outlets but they look at them [the forecasts] in a very different way. We [now] look more at seasonality. We are trying to split [the data] down into more detail then they are used to doing. And [they are now] looking at things differently than they used to because they were used to doing a financial forecast and forecasting for staff scheduling." —*Siv Forlie*, Shangri-La International Hotel Management Ltd.

**Function space RM at Hyatt.** "When you start to record the demand for, and the use of, those rooms you discover that different ones have different values based on location—perhaps noise or an outside window with a view—different attributes which might not impress you right up off the bat but give you an opportunity to price them more variably." —*Greg Cross*, Hyatt Hotels Corporation

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Avero and a suite of internally developed tools, restaurants within FRHI properties have the capability to visualize key data (e.g., RevPASH by day of week, arrival patterns, menu item performance), and to use those data to forecast and make informed demand management and menu-based decisions. Most important, learning RM concepts and having access to data on restaurant performance has helped the food and beverage team devise strategies and innovations to lift revenue.

A focus on non-room revenue streams has shifted the way that these hotel companies are developing and using demand forecasts. Sharon Hormby, senior director of total yield systems, global revenue management, for Marriott International, described the significant progress that Marriott has made in terms of forecasting, by shifting from individual functional area forecasts to a single hotel forecast. This transition has enabled the development of RM strategies across functional areas that are driven from the same platform. Many of the other interviewees indicated that each functional area remains largely responsible for generating its own forecast, dictated primarily by hotel size and complexity of operations. However, two participants spoke to a shifting focus in how forecasts are being developed, away from the level of detail required for financial forecasts and

labor scheduling, and towards the level of granularity and detail that is required for RM decisions.

FRHI's Jeanette Ho spoke to the importance of developing deep drill forecasts that enable personnel to proactively build demand, and reveal opportunities to apply differentiated pricing. She noted that, while many of the group's hotels had a broad understanding of peak and off-peak demand patterns, the introduction of more granular forecasts has provided a more nuanced picture of demand (e.g., this Friday is really super peak for the main ballroom, but next Friday is just an ordinary peak). This, in turn, has provided the company an opportunity to move from fixed pricing within seasons to more rigorous price differentiation.

The opportunity to apply differential pricing in the function space arena was highlighted by Greg Cross, senior vice president of revenue management for Hyatt Hotels, who explained that, while public space inventory pricing formerly tended to be based on flat fees, the characteristics of different units, for example, their location or view, provide the opportunity to apply variable pricing. Hyatt Hotels Corporation has implemented a complete suite of tools to enable catering managers to better quote and understand the pricing differential for public space rooms (see Exhibit 3).

**EXHIBIT 4**

## Customer lifetime value

***Assessing customers based on total spending***. "For us, it is understanding and yielding our customers, today in segments [with the exception of high end customers] one day hopefully it's by customer, based on the totality of their spend. For us, it's really about understanding each guest's contribution, revenue contribution through the different revenue channels that we have within our property. Not only do we want to look at the rate that they pay, but also the F&B that they are generating through the banquet operations, and we want to look at the room rental that they might pay. And we want to also try to define the propensity to gamble from each segment. So what we can do is we can develop a pretty well rounded understanding of the profitability of each segment."—***Mark Molinari***, *Las Vegas Sands Corp.*

***Problems of traditional segmentation.*** "The lines of segmentation have become so blurry that it's really hard to say that, if a customer is a corporate customer, they typically stay Monday, Tuesday, or Wednesday nights, they typically book through a global distribution system (GDS), and they typically spend "x" amount. Today, it's very difficult to be able to assign a value based on segment type because you know that corporate customers are not only booking differently—you know they used to book through a GDS but now they like to book on an online travel agent, or perhaps they like to book on the hotel website. All three of those, GDS, OTA, and hotel website, have a very different cost; therefore it affects the value of that individual customer significantly. And because of the way human nature is kind of blurring work with personal life, many times you know you get customers who stay over the weekend now, where they never used to do so. So it's no longer safe to say that business customers book this way and they stay on these nights. Their value has changed."
—***Kathleen Cullen***, *Commune Hotels + Resorts*

***Customer loyalty score at FHRI***. "We're now developing the predictive model for a loyalty score per customer. It's exciting and the application could be very wide. For example, this loyalty score can be fed into our RM system to actually drive decisions. So someone who is anticipated to give us lower revenue for this one stay, but who has a high loyalty score and therefore high lifetime value, would get preference for a particular reservation."—***Jeannette Ho***, *FHRI Hotels and Resorts*

***Closed rates at Hyatt.*** "We are also in the early stages of seeing what it potentially cannibalizes, what relationship damage it might cause with large corporate accounts we work with if, for any reason, they are not keen on their employees having their own rate in addition to the company's negotiated rate."—***Greg Cross, Hyatt Hotels and Resorts***

***Corporate effort at Marriott.*** "It isn't just the RM function at the hotels or the clusters or the markets trying to figure out how to capture more loyalty or more share of wallet, there's a corporate effort around this as well, because they've got so much data they can see trends better than someone in a smaller space with less data. We're still evolving that relationship [RM and consumer insight] and how they tie in. So that's a very exciting area because as they [consumer insight] develop insights, how can those insights be turned into money?"—***Sharon Hormby***, *Marriott International*

## Customer Lifetime Value

Participants generally agreed that a focus on customers' true value to the firm is critical, particularly in light of the rising costs of customer acquisition (see Exhibit 4). Siv Forlie pointed to "business mix optimization" at Shangri-La, emphasizing that the focus is on identifying the hotels' most profitable customer segments and developing strategies to drive demand from those segments. Mark Molinari, of Las Vegas Sands Corp., spoke to the goal of setting prices for individual customers based on the totality of their spending, while Kathleen Cullen, senior vice president of revenue and distribution for Commune Hotels + Resorts, highlighted the need to understand the value of customers as individuals across booking channels and stay types (that is, business and leisure) rather than within traditional segments.

Both FRHI Hotels & Resorts and Hyatt Hotels Corporation focus on an individual customer approach. FRHI Hotels & Resorts is conceptualizing a customer loyalty score to make it easy for front-liners such as reservations personnel to understand the value of any one customer. The company is also exploring the inclusion of a customer satisfaction score in its RM system, based on guests' survey responses to recommendation and repeat-purchase questions. Hyatt Hotels Corporation is focusing on individualizing rates, such that individual customers have their own rate at all Hyatt hotels. This experiment allows customers to check the availability of their individual rate

**Profit perspective**

***Profit focus at IHG.*** "We've really started to be cognizant about the fact that, when we look at total demand, each piece of demand comes with revenue, and it also comes with costs. So we've really started to be conscious of what those costs are and how to factor them into our decision making."—***Craig Eister***, *InterContinental Hotels Group*

***Acquisition cost.*** "While RM price optimization tools might raise revenue two or three points, you can increase your net revenue by upwards of 10 percent if you start managing it."—***Cindy Estis Green***, *Kalibri Labs*

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every time they travel to a particular city or country. Hyatt also has an upselling program whereby predictive data analytics are applied to customer data to detect patterns and generate upsell recommendations after the room reservation. This program relies on analytics that are far more sophisticated than earlier programs and that have helped to increase the average post-reservation incremental room revenue by 60 percent.[16]

A centralized view of the customer is key to driving revenue at Marriott, which has moved the RM function to a broader consumer insight and revenue strategy team. This organizational restructuring allows the team to derive data-driven insights about customer behavior to support strategic decisions and personalization efforts.

## Profit Perspective

All of the hotel company participants in our study indicated that their companies are placing an increased focus on the cost dimension of customer value (see Exhibit 5). Seven of the participants pointed to the importance of understanding and tracking customer acquisition costs, with a number of initiatives underway in this domain. For example, Las Vegas Sands Corp. is working toward standardizing how distribution costs, both commission- and merchant-model-based, are viewed across individual hotel properties within the group. Cindy Estis Green, co-founder and CEO of Kalibri Labs, underscored the importance of understanding and managing acquisition costs, arguing that true growth in net revenue comes from managing those costs.[17] Advances in systems development reflect the growing concern with the management of customer-related costs. Marco Benvenuti, co-founder and

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[16] See also: O' Neill, S. 2015.
"Hyatt Hotels globally rolls out its predictive analytics for upsells." Tnooz, www.tnooz.com/article/big-data-travel-lessons-hyatt/.

[17] See: Cindy Estis Green and Mark V. Lomanno, *Distribution Channel Analysis: A Guide for Hotels* (Orlando, FL: Educational Institute of the American Hotel and Lodging Association, 2012).

chief analytics and product officer for Duetto, offered the example of initiatives at Duetto that are geared toward accounting for distribution costs and profit from non-rooms outlets in RM solutions.

## Challenges to Implementing THRM

All of the participants in the study noted that the application of RM to non-room revenue streams is difficult due to the lack of appropriate platforms or of an integrated RM solution. Ten participants spoke to the lack of system integration which impedes the ability to have a complete view of individual customers and customer segments. IHG's Craig Eister noted that, while the property-level RM function can accumulate a great deal of customer information the challenge is linking that information across the brands and throughout the organization.

On a related note, Marriott's Sharon Hormby spoke to the technological challenges associated with capturing share-of-wallet data. Unlike casino hotels that are able to track customer spending through their loyalty programs, traditional hotels are often unable to centralize customer spending data. "It's easy to lose track of our share of wallet, because all the data are not nicely collected," she noted. Loyalty program members don't always use their loyalty card, for example, and instead use personal credit cards or pay in cash, making it difficult to assess their total spending. Even casinos lose some customer spending information, because they do not own all of the outlets at their properties (e.g., spa and F&B outlets). Gathering a comprehensive customer profile would require the buy-in and participation of key partners, and the ability to input that partner-owned customer information into the hotel's CRM system. As Sharon Hormby noted, while technology and various information sources (e.g., loyalty program data, credit card company data) could be used to "patch together the quilt of data," that is an expensive process.

While three interviewees stressed that progress is being made towards developing tools for non-room RM,

Exhibit 6

**Challenges to implementing THRM**

*Linking data across the organization*. "It's big data but it's also integrated data and understanding everything about the consumer—their preferences, their past experiences, what they like and don't like, what resonates with them, and how that feeds into the price-elasticity. It's really important to link that data journey together because that's the foundation of how we make customer-centric RM come to life."—*Craig Eister, InterContinental Hotels Group*

*Data availability.* "Function space forecasting is infinitely more complicated than rooms forecasting. Think how many transactions you've got [in rooms] to produce forecasts versus the number of transactions you've got to produce data points in function space. There's a massive difference. So function space forecasting is much more difficult, even when the data do exist." —*James Ruttley, IDeaS Revenue Solutions*

*Data extraction and presentation*. "What we found frustrating was how data were being dealt with. We use Delphi, which does not extract all data or make sense of analytics very well. So a lot of work went into data management, getting the right data, and [figuring out] how to display the data in an understandable way."—*Siv Forli, Shangri-La International Hotel Management Ltd*.

*Accessible analytics.* "It's when you can get information into the hands of all relevant personnel that you can move the organization into a culture of fact-based decision making, and then you can achieve the vision of all personnel acting on the same information and toward the same goal. If you can't have that, you're never going to optimize performance."—*Kelly McGuire, Wyndham Destination Network*.

barriers still remain. Duetto's Marco Benvenuti called for hotel companies to think about moving toward cloud sharable solutions for property management, central reservations, and channel management systems. The resulting connectivity could facilitate the use of more data streams as inputs to RM systems, thereby enhancing RM decisions. He added that the efforts of organizations such as Hotel Technology Next Generation, which is focused on fostering collaboration and partnerships to develop advanced systems and solutions, will help the industry make better use of the cloud.

Eleven of the study's participants pointed to a number of data-related challenges associated with the implementation of strategic profit management, including poor quality data, problems with data extraction, and a lack of industry-wide definitions and measures. To permit detection of patterns in data that allow for meaningful decisions, the data must be accurate, available in sufficient volume, extractable from existing systems, and presentable in a format that is meaningful to the decision-maker. RM vendors are well aware of this issue and are working to make performance data readily available to decision makers across functional areas. Kelly McGuire, vice president, advanced analytics, Wyndham Destination Network, spoke to the development of inflexible visualization tools and technologies, underscoring the importance of what she terms "accessible analytics" for RM.

In the domain of performance measures, accepted industry-wide definitions and measures exist for room-based RM (e.g., RevPAR), but there is a lack of common terminology in other areas, such as function space or spas. There are many ways to measure non-room RM performance, including size of function, time of day, and meal and client type, but no industry standard exists to guide development efforts. The hotel companies represented by our study participants have developed metrics to evaluate RM performance in the rooms division and beyond, including total revenue divided by revenue by revenue stream (4 companies), contribution by revenue stream (8 companies), total revenue per customer (4 companies), total contribution per customer (1 company), net RevPAR (4 companies), GOPPAR (3 companies), and revenue per square foot (3 companies). However, from a competitive benchmarking perspective, RevPAR remains the primary performance indicator. Consequently, as pointed out by David Warman, vice president of revenue management and worldwide reservations for Four Seasons Hotels and Resorts, this single benchmark metric is often the dominant driver of a hotel's RM efforts.

The sheer complexity of non-room revenue streams should not be overlooked. Five of the study's participants spoke directly to the challenges associated with this complexity (see Exhibit 6). Multiple meeting and banquet room sizes and configurations, different types of on-site restaurant outlets, and the many different menu options and items used across events and outlets, makes managing these revenue streams complex.

EXHIBIT 7

**Culture, structure, and human capital**

***Added value***. "I believe that if superior results are delivered through the application of RM and the RM effort is providing valuable insights and data that helps leadership make more profitable decisions, your RM culture will grow and the voice of revenue management will have a substantial impact on the business strategy."—**David Warman**, *Four Seasons Hotels and Resorts*

***Deliver a return on investment.*** "What you want to be careful about is that you don't create busy work and that you don't create a lot of work that doesn't create return on investment. You can give an awful lot of process to people who already have a job to do and say we'd like for you to do all this too. But you better be damn sure that the work is actually going to increase revenues to a point where you're justifying the additional labor."—**Greg Cross**, *Hyatt Hotels Corporation*

***Organizational structure***. "We started with an organizational structure that focused on total hotel before we even developed the systems to support it. And that goes back more than a decade. It started first with people, and how they were incentivized and developed, then pulling together a hotel-wide forecast of demand and revenue, and developing business processes around weekly meetings with a strategy team that does not consist of the RM and general manager alone."—**Sharon Hormby**, *Marriott International*

***RM culture***. "So our huge focus over the past couple of years has been really growing the concept that RM is not just a stand-alone department. It is not just a person at the hotel who understands certain things, but it is fully integrated into the value proposition that we provide our owners and our guests. So I really do believe that there's a strong culture of driving THRM at IHG, and that's where we've really been able to create this technology vision, this RM vision, and really this vision of integration across our work streams to come up with the best results."—**Craig Eister**, *InterContinental Hotels Group*

***Consultation***. "I cannot own that project [in F&B] because of the operational part. I can own events, I can own groups, but when it comes to F&B, I cannot own it; I can only advise. It needs to be owned by the operating department."—**Siv Forlie**, *Shangri-La International Hotel Management Ltd.*

## Culture, Structure, and Human Capital

With the growing complexity and reach of RM, study participants underscored the need for a support system that drives a strategic profit focus: a strong RM culture, an organizational structure that supports a cross-functional approach to non-room RM and customer value initiatives, and personnel who can sustain those initiatives (see Exhibit 7).

All hotel company participants identified their companies as having a strong RM culture, although two participants noted that the philosophy of the property-level general manager does determine the strength of the RM culture at the hotel level. Shangri-La's Siv Forlie spoke about the role of education in fostering a RM culture and pointed to the ongoing, pivotal role that training has played in fostering an understanding of RM and growing an RM culture at Shangri-La. This emphasis on training is reflected in the investment that the hotel companies that participated in this study have made in developing special training programs for RM and the creation of certification programs that go beyond simple systems training to promote an understanding of the core concepts of RM.

A number of participants also spoke to the role of the RM function in evolving a strong organizational culture. For example, David Warman of Four Seasons Hotels and Resorts stressed the importance of the RM function adding value to the organization, and providing leadership with insights that drive profitability. In a similar vein, Hyatt's Greg Cross explained that the evolution of an RM culture requires a focus on RM-related tasks that deliver a return on investment.

Sharon Hormby highlighted the importance that Marriott ascribes to an organizational structure that extends responsibility for RM-related initiatives beyond the RM function, a concept that all hotel participants said was important. The notion of organization-wide engagement is reflected in participants' reports of cross-functional involvement in non-room and customer-centric RM initiatives. All of the hotel companies reported that efforts to maximize customer value have also opened the door for collaboration between RM and other functional areas. Depending on the organizational structure and size of the hotel company, the specific functional areas that RM collaborates with on customer-focused initiatives

EXHIBIT 8

**Strategic revenue management system**
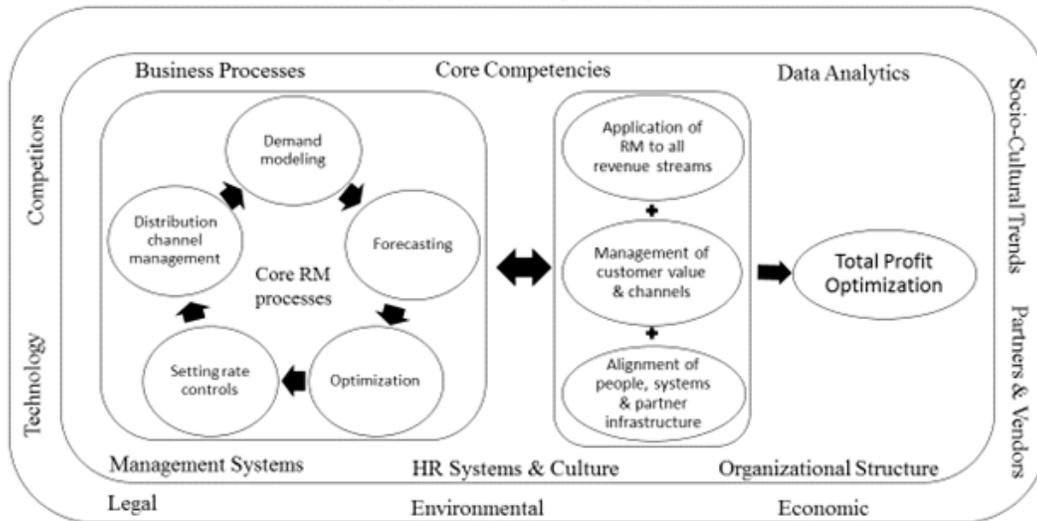


include marketing, distribution, e-commerce, loyalty programs, and customer relationship management. In terms of non-room RM applications, for example, the focus of corporate-level RM at Hyatt Hotels Corporation is on the development of software tools that allow users to make data-driven decisions quickly without having to construct and maintain the necessary analytical tools. The RM team then works closely with the corporate-level catering leaders to give guidance and instruction on how the various processes should be incorporated into F&B operations. In a similar vein, the RM function at IHG focuses on how to integrate RM practices with the company's F&B strategies. Corporate personnel then work closely with the unit level, focusing first on best practices and then moving into the application of systems and tools. In that regard, IHG's Craig Eister highlighted the importance of providing operations managers with tools and support rather than forcing a "system" on them. On a related note, five of the hotel company participants underscored the importance of RM personnel adopting a consultative approach to working with operations, rather than "owning" all non-room RM efforts.

Consistent with the idea of integrating activities across work streams and breaking down functional silos, Jeannette Ho explained that FRHI Hotels & Resorts is fostering an organization-wide RM culture with the introduction of RevPRO. This program brings together all of

a hotel's revenue leaders in a "war room," where departmental action plans, gaps, and opportunities are posted around the walls of the room for all to see. This enables cross-pollination of ideas and engenders a total hotel revenue mindset. Since all other departmental meetings take place in the same room, each team can see information regarding demand projections and initiatives in other operating areas (e.g., upcoming large groups, initiatives in the transient room segment) and can take that information into account when discussing their own demand projections. When describing the RevPRO program, Jeannette Ho emphasized the goals of developing a culture where every department is fully aligned on the revenue strategy of others, and moving out of silos by providing a "transformational platform to try to bring all the right people together and have them discuss the right things."

The successful implementation of RM-related initiatives depends as much on people as on the technology designed to support those initiatives.[18] Participants agreed that the evolving scope of RM places more demands on the revenue manager than ever before. The skill set identified by participants reflect those identified by Kimes: analytical ability, communication skills, and the

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[18] Jones, P., and Hamilton, D. 1992. "Yield management: Putting people in the big picture." *Cornell Hotel and Restaurant Administration Quarterly*, 33(1), 89-95.

ability to influence others.[19] However, six of the participants emphasized the need for talent that reaches beyond analytical ability. They characterized an effective revenue manager as being forward looking, focused on using data to form actionable strategies, and successfully influencing ownership and executive management to follow those strategies. Creativity was also identified as a necessary skill in relation to strategy development.

## A Framework for Taking a Strategic Perspective

Based on our interviews and previous research, we have developed the strategic framework for viewing total hotel revenue management shown in Exhibit 8. Most hotels engage in the core RM processes of demand modeling, forecasting, optimization, setting rate controls, and managing distribution channels. The senior leaders we interviewed are extending and refining traditional RM by applying RM to all revenue streams, focusing on managing customer value and distribution channels, and working to align personnel, systems, and partner infrastructures. This extended version of RM allows operators to optimize total profit, which we see as a future objective for the hotel industry. Successful hotel organizations will migrate from core RM into THRM by adjusting system-wide management systems, business processes, HR systems, culture, organizational structure, and data analytics—thus developing the enterprise's core competencies (skills, resources, and assets).

A strategic RM system should begin with an analysis of the organization's internal and external operating environment. The external environment encompasses sociocultural trends, economic influences, technological influences, environmental, legal, competitive, and partner and vendor influences (illustrated in the outermost portions of Exhibit 8). For example, advances in data analytics and cloud-based technologies on the vendor side will allow managers and operators to devise more customized value-centric offerings. In terms of the internal operating environment, the formulation and implementation of specific RM strategies requires designing an organizational structure, controlling organizational processes, and managing resources and relationships with stakeholders, so as to develop competitive advantage. Our interviewees have identified the effort of building systems to support company-wide total revenue management initiatives as a major challenge. An organization may discover, for instance, that a proposed RM strategy cannot be implemented feasibly within the existing management systems and with the existing levels of training and employee

skill. That may require the firm to fine-tune its strategic approach and to modify its systems and structures.

Core RM processes and expanding THRM activities must be linked to the firm's overall strategic planning process, which in turn requires linking organizational systems to the external environment, which itself is constantly evolving. Monitoring, forecasting, and adapting to this evolving hospitality landscape is a costly task, but those are essential tasks to ensure that a firm's RM approach is aligned with the overall enterprise strategy and other functional units. In addition to linking RM to the firm's strategy-creating processes, revenue managers should be involved in the broader enterprise-wide process. Firms obtain competitive advantage from superior resources, and one such resource is RM knowledge, together with well-considered strategies for managing those resources, and superior relationships with partners and vendors.

Despite the importance of linking the RM function with the broader firm strategy and competitive landscape, however, strategic planning does not always lead to the kinds of changes that are necessary for a firm to remain competitive over the long term. In the next section, we summarize our participants' suggestions for embedding a strategic RM mindset throughout the firm.

## Opportunities for Hotel Operators

As a starting point for developing an advanced RM system, participants reinforced the importance of fostering a cross-functional organizational culture focused on total hotel performance. For example, they suggested adopting measures that drive a focus across hotel properties on non-room revenue, such as the F&B STAR report, to avoid the problem of focusing exclusively on a few parameters of success. Participants also suggested four specific areas for action:

*(1) Develop RM programs for non-rooms revenue streams.* Seven of the study's participants pointed to the development of RM programs for non-rooms revenue streams, with function space being the leading area of opportunity. When assessing the merits of developing a formal RM program, hotel operators should consider the size of non-room operations and the current, or potential, revenue from those non-rooms revenue streams. They also need to determine the feasibility of implementing a standard or custom RM program across different hotel units.

*(2) Extend pricing opportunities across revenue streams and segments.* Not all non-room assets within a given hotel may generate sufficient revenue to warrant the formal application of RM practices and tactics. However, seven participants nevertheless pointed out that one

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[19] Kimes, 2010.

can apply a revenue management mindset, particularly in in regard to pricing. For example, could discounting a hotel's laundry service over the weekend encourage leisure customers to use it? Could in-room movies be priced competitively enough to encourage consumers to move away from their laptops and turn on the flat screen? Instead of charging a flat fee for overnight parking, could a variable pricing approach be applied to parking fees during low demand periods, rather than have an empty garage?

*(3) Develop a distribution strategy for non-rooms inventory.* The distribution strategy for all of the hotel companies represented in this study remains largely focused on guest room inventory. However, participants recognized the importance of developing a holistic distribution strategy. For example, Kathleen Cullen of Commune Hotels + Resorts emphasized the need for hotels to understand how consumers look for information and book each product or service, the cost of each distribution channel, and the importance of developing a strategy to support each channel.

Three of the study's participants spoke to the need for hotels to more aggressively exploit the revenue opportunities that booking engines can provide by pre-booking spa appointments and other services (e.g., TravelClick's iHotelier Web 3.0 booking engine). Seven hotel company participants see mobile's potential to drive revenue for non-room assets, and they see mobile as a significant growth area for the hotel industry. A number of companies (e.g., HandHeld Hospitality, iRiS Software Systems, and Cardola) have developed mobile applications that enable customers to order room service and book non-rooms services on the go, for instance, and enable hotels to push promotions for non-room outlets. That said, most agreed that the industry hasn't begun to scratch the surface in determining mobile opportunities.

*(4) Capture more customer level data and make it more accessible.* Five participants stressed the need to recognize the profit contribution associated with individual customers or segments when making pricing decisions and developing market segment strategies. From a cost perspective, this requires going beyond the costs traditionally captured on the hotel's profit and loss account (e.g., commissions) to effectively track all other acquisition costs (e.g., merchant model–based costs). From a software perspective, a number of RM solutions have the capability to incorporate cost data into the optimization process. Therefore, without a change in philosophy or approach, systems capabilities can take total profit contribution into consideration, rather than revenue alone.

On the revenue side, to fully appreciate customer value, it is essential to keep in mind that customers of higher-end hotels have a substantial total folio spending pattern beyond the cost of their room. As we indicated above, incentives offered by hotel loyalty programs are, in many cases, not sufficient to motivate customers to identify themselves throughout all of their in-hotel transactions, thus creating gaps in customers' spending picture. Hotels need to better engage customers in their loyalty programs, and integrate these programs across all departments within the hotel property, such that true customer spending data are captured.

## Toward Strategic Profit Management

It is an exciting time for applying revenue management more comprehensively. Our participants show us that hotels are moving beyond the application of rooms RM to the systematic application of RM principles to other revenue streams, particularly function space and F&B. Hotel companies are also exploring more deeply the management of customer value. As evidenced from this study, some companies are already on the road to operationalizing individualized rates and differential treatment of customers based on their lifetime value.

Movement beyond traditional RM activities is not without challenges. Technology has yet to advance such that all revenue streams can be optimized simultaneously. While systems integration issues hamper customer-centric RM, some of the companies in this study are independently developing internal tools and applying off-the-shelf software to support their RM endeavors. Advocacy is still needed to ensure that technology partners provide better integration of systems.

Our interviews suggest that hotels need to improve their capacity to capture guest spending and cost data—particularly acquisition costs—and develop long-term strategies for increasing their ability to capture these needed data. Despite the barriers that our participants have outlined, the opportunities they have identified to grow profit can be initiated now by hotel companies regardless of their size (e.g., calculation of the actual cost of acquisition by distribution channel, applying price opportunities across various non-room revenue streams).

The findings of this study underscore the importance of a supportive organizational culture and structure. All of the initiatives discussed by the study's participants depend on strong inter-departmental cooperation and collaboration. Along that line, the FRHI Hotels & Resorts RevPRO program provides a practical and cost effective example of how a hotel company can foster an organization-wide RM culture. Sustained progress requires the establishment and industry-wide acceptance of performance measures that better capture total hotel performance, from both a revenue and net income perspective.

Finally, due to technology and data-related constraints, the hotel industry has some way to go before the goal of simultaneous optimization across revenue streams is achieved. The separate management of individual revenue streams is much reflected in the terminology used by major hotel companies to describe their RM initiatives (e.g., events RM, F&B RM, and rooms RM). Leading hotel companies are clearly focused on the profit impact of revenue management decisions and have begun to measure the cost of customer relationships. The fact that some hotel companies are now using the term *total hotel profit optimization* reflects a movement toward a more comprehensive and strategic role for future RM. With the continued general use of revenue, as opposed to profit, management may inadvertently be maintaining a narrow focus on RevPAR as the leading external performance benchmark. Over time we have seen the migration from the term yield management to become revenue management, as the role and scope of the field has evolved. Perhaps it is time to take a further step and shift from revenue management to *strategic profit management* as the nomenclature the hotel industry adopts. ∎

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