

Online upselling: Moving beyond offline upselling in the hotel industry

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### **Abstract**

The purpose of this study is to understand how online upselling is used in the hotel industry as a part of revenue management strategy. This study used a convergent parallel mixed method design where qualitative and quantitative data were collected in parallel, analyzed separately, and then merged. Study 1 took a qualitative approach, exploring how online upselling programs can provide additional value over offline upselling and traditional revenue management practices. Study 2 adopted a quantitative approach to analyze customers' bidding patterns for superior room categories through secondary data. Findings indicate that an omni-channel approach to upselling can tackle the fragmented nature of multichannel upselling communications to provide customers with consistent information and experience across these channels. Through an omni-channel approach, the hotel industry can develop personalized and streamlined upselling strategies.

**Keywords:** upselling; online upselling; hotel industry; omni-channel.

## 1. Introduction

Upselling is a popular technique used in hospitality and many other service industries to increase revenues (Norvell, Kumar, & Contractor, 2018). In the hotel industry context, customers with an initial room booking are offered the chance to turn in their initial booking for a superior, more expensive room category (Heidig, Wentzel, Tomczak, Wiecek, & Faltl, 2017). This technique helps hotels sell higher room categories, such as club and suite rooms, which would otherwise be empty or used for free upgrades. In a revenue management context, the capacity for each type of room is fixed; however, hotels frequently find that some rooms' capacity are underutilized as a result of stochastic demand across different types of rooms over time (Cui, Duenyas, & Sahin, 2017). If utilized effectively and in connection with revenue management strategies, upselling has the potential to increase revenues (Kamakura, 2008) and cut down selling costs (Rothfeder, 2003). Upselling focuses on increasing the transaction size per customer rather than acquiring new customers, which helps to cut down the selling cost (Ebster, Wagner, & Valis, 2005).

Upselling in the hotel industry can be done at any point during the customer cycle, including during the booking process, pre-arrival stage, during check-in, and during the stay. For a long time, upselling was done offline at the hotel's front desk during check-in. Automated online upselling systems, namely Nor1, Oaky, UpsellGuru, and Upgrading.cc, have been adopted by hotel companies to take advantage of online upselling opportunities. Nor1's eStanby Upgrade is used by Hilton, IHG, Radisson, Accor, and Wyndham (O'Neill, 2018). Customers of UpsellGuru include Alila Hotels and Resorts, Best Western, Penta Hotels, Harbour Hotels, and several independent and boutique hotels (UpsellGuru, 2018). Oaky is used by Pullman Hotel and

Resorts, Mercure Hotels, Radisson Blu, and Apex Hotels (Oakly, 2018). Upgrading.cc is working with Dorsett Hotels (Upgrading.cc, 2018). Marriott and Hyatt are among the few hotel companies that developed their own online upselling systems. Widespread adoption of online upselling systems by hotel companies is an indication that online upselling is at the forefront of the hospitality industry in part due to the development of the technology and technology-savvy customers (Jocelyn, 2018).

Despite the popularity and frequent use of upselling, to our knowledge, this topic has not been studied by academic research in the hospitality industry except for two studies (Heidig et al., 2017; Norvell et al., 2018). Heidig et al. (2017) examined the effects of cognitive effort and goal frame on the persuasiveness of upsell offers in the hotel and rental car contexts. Norvell et al. (2018) assessed the customer-based impact of upselling versus down-selling in the restaurant industry. Although these two recent hospitality studies focused on customer perceptions of upselling offers, this literature is limited by its focus on offline upselling. More and more consumers use information technology to book their hotel rooms, and hotels use technology-enabled systems at the core of their decision-making processes. Therefore, the role of online upselling in revenue management remains on the periphery of hospitality revenue management research. Other than these two studies, research on upselling has mostly been done on the operational research level, where researchers focused on modelling upselling in various service industries (Bohutinsky, 1990; Cui et al., 2017; Gallego & Stefanescu, 2009; Khwaja & Yang, 2014; Kim & Kim, 1999; Yilmaz, Pekgun, & Ferguson, 2017). However, these modelling research studies from the operations research stream mostly focused on offline upselling models, offering limited insight into the hospitality industry, which is characterized by dynamic and

demand-based pricing with highly automated data management and decision-making systems (Denizci, Guillet, & Mohammed, 2015).

The overarching purpose of this study is to fill the knowledge gap through gaining an understanding of how online upselling is used in the hotel industry as a part of a revenue management strategy, considering both the perspective of the customer as well as that of the service provider. Specifically, the research aims to:

- explore how online upselling programs can provide additional value over offline upselling and traditional revenue management practices;
- investigate whether there are any patterns based on socio-demographic backgrounds and customer profiles in how hotel customers bid on superior room categories; and
- introduce an upselling model for the hotel industry that considers the complexities of today's multifaceted ecommerce environment.

## **2. Study Background**

### **2.1 Defining Upselling**

The most comprehensive definition of upselling conceptualizes it as a useful sales technique, referring to the attempt to persuade customers to purchase a product or service at a higher level, and is also richer in function for customers and more profitable for the company, instead of the initial booked product and consequently expanding the lifetime value curve of a customer (Carlo, 2009). Table 1 presents additional definitions of upselling. Upselling is largely implemented in the service industry, such as car rentals, airlines, performing arts companies, hotels, etc. For example, as a common practice during booking or check-in at airlines, customers are often encouraged to access the higher-level product and service with extra fees, like having a

privileged boarding order and access to a better seat, which brings customers more advantages and also make the company more profitable. Previous studies showed that the effect of upselling on a company's strategy has become a prevalent area of study, especially in the context of the customer relationship with management and revenue management (Bauer, 2003; Yi & Baumgartner, 2008).

\*\*\* Please insert Table 1 about here\*\*\*

Cross-selling and upgrades are two terms that can get mixed up with upselling (Heidig, 2012). "Would you like fries with that?" is a typical sentence in most fast food outlets that helps sell millions of fries every year (Sharma & Sharma, 2015). When purchasing a sandwich, customers can hardly escape the salesperson's recommendation to add fries. Selling the additional relevant product without altering the initial purchase is referred to as "cross-selling" (Kamakura, 2008). An "upgrade" can be conceptualized as free offers of more than the initially expected service or product to customers. Compared to upselling, the major difference is that an upgrade offer does not require customers to have to pay. It is common for hotels to upgrade the room type of guests, especially for loyal customers (i.e., repeated customers) or customers with long life-time value for the hotel. Opposite to upselling, "down-selling" is defined as a selling activity which guides customers to buy products in lower-than-originally-booked categories (Norvell, Kumar, & Contractor, 2018).

## 2.2 Upselling in the Service Industry

Though the upselling technique is broadly used in the service industry, there is no large body of academic research that focuses on it, especially in the hotel industry. Much of the research has been conducted in the context of operations management, marketing, and service management in service industry sectors including airlines, life insurance, and car rental (Bohutinsky, 1990; Khwaja & Yang, 2014; Kim & Kim, 1999; Pun, 2013). Among the studies conducted using the hotel industry setting (Cui et al., 2017; Heidig, 2012; Heidig, 2017; Yilmaz et al., 2017), two focused on modelling upselling and two others focused on marketing. With the exception of one study (Yilmaz et al., 2017), all studies conducted in upselling focused on offline upselling.

Gallego and Stefanescu (2009) stated that the capacity provider who owns inventories at a fixed price in the long run could inevitably face the problem of a mismatch between supply and demand. Reasons for this could be forecast error, strategic supply limits, or just fluctuating demand that suffers from seasonality effects. Revenue management tools, including pricing tools (price discrimination, dynamic pricing, lowest price guarantee) and non-pricing (overbookings, length of stay control, room availability guarantee), are potential solutions to this problem (Ivanov & Zhechev, 2012).

Based on the two major study fields of customer relationship management and revenue management, Table 2 summarizes relevant studies and their main findings on upselling in various industries. Airlines have an extensive interest in studying revenue management (RM) solutions, including upsell estimates. Several models and algorithms are utilized, based on which a new stochastic programming formulation was developed by Pun (2013) to model network RM problems when considering both capacity nesting and customer upsell at the itinerary level. The

proposed upsell heuristic was proved superior than past algorithms. Furthermore, Bohutinsky (1990) introduced a method to identify the revenue benefits and cost of an upsell strategy in the actual airline environment. It was found that upselling is more welcomed by customers of the highest two fare classes, which reflects the impact of customer segmentation on effective upselling. Khwaja and Yang (2014) noted that business and weekend users have a higher responsive rate to upsell offers in the car rental industry.

\*\*\* Please insert Table 2 about here\*\*\*

Another growing study interest regarding upselling is the relationship between a salesperson's engagement and customer's response to upsell offer. According to Friestad and Wright (1994), customers are likely to determine their response decision through their judgement about a salesperson's motivation to upsell. In this regard, Khwaja and Yang (2014) found that the employees who care about customer-centric issues have a larger influence on upselling in the car rental industry. Likewise, Norvell et al. (2018) defined down-selling as a customer-oriented selling approach that lets customers perceive a salesperson as trustworthy and helps increase the satisfaction level.

Specific to hotel industry, past studies were mainly developed around several core ideologies: the effect of cognitive effort and goal frame on upselling (Heidig, 2012, 2017; Heidig, Wentzel, & Tomczak, 2014); the evaluation of conditional upselling (Cui et al., 2017; Yılmaz, Pekgün, & Ferguson, 2017); and the influence of strategic and myopic customer behavior on upselling (Cui et al., 2017; Yılmaz et al., 2017). Heidig (2017) conceptualized upselling as a two-stage decision process which comprises the process of determining the initial



reservation and the final decision for or against the upsell offer. The study proposed a framework to better understand when and why customers are likely to accept or reject upsell offers. In the framework, the concept of cognitive effect, goal frame, anticipated inaction regret, and customer responsibility for outcome are introduced in order to explain how the stage of initial choice affects the final decision.

The stream of literature on conditional upgrades in the hotel industry was conducted in an operations management context, where researchers modelled the pricing of conditional upgrades. Cui et al. (2017) and Yilmaz et al. (2017) studied the standby upgrade (alternative to “conditional upgrade”), referring to when the customer is only charged if the upgrade is available at the time of arrival. The study was pioneered by Cui et al. (2017), who explored optimizing the standby upgrade price and introduced a fluid model to effectively estimate the optimal upgrade prices for the underlying stochastic model.

Yilmaz et al. (2017) followed the study and focused on simultaneously optimizing the prices of standby upgrades and the premium rooms by considering the hotel’s premium room capacity and market characteristics for a specific day of stay. This modelling study outcome guides hotels in appraising whether they can suitably provide standby upgrades. In their study, customers were categorized into myopic and strategic types based on differed customer behaviors. Myopic customers are less certain about hotels’ upselling strategy, while strategic customers know it well so that they might initially book a standard room and wait for the discounted upsell offer. However, this can cause a revenue decrease from the direct sales of a hotel’s high-quality products, which is called the cannibalization effect and will further intensify the imbalance between demand and supply (Gallego & Stefanescu, 2009). Cui et al. (2017) modelled consumers’ strategic behavior of anticipating the upgrade possibility by considering

the factors of arrival time and product availability information. On this basis, the study derived the optimal upgrade price when incorporating strategic consumer behavior. Yılmaz et al. (2017) studied the interaction effect between the two customer types and the market size for premium rooms on hotels' additional revenue. The study results showed that the standby upgrade is a more powerful tool when customers are myopic and premium-to-standard room ratios are high. Gallego and Stefanescu (2009) showed that even when customers know that they will be charged differently depending on distinct conditions, such as their booking time, they still expect to receive upgrade and upsell priority for their higher price paid. They show that offering upgrades only to the next higher category is more in line with customers' expectation of fairness. Hence, this should trigger hotels paying special attention to a fair upselling mechanism.

### **2.3 Online Upselling Systems**

Although important, upselling is mostly discussed and implemented only at the operational level, which impedes its development. In addition, it seems that upselling metrics and data requirements are ignored in the hotel upselling research field (Ivanov & Zhechev, 2012). Gallego and Stefanescu (2009) pointed out that one promising direction for future research is the optimality of upgrades under dynamic expectation formations, together with strategic capacity planning with capacity allocation, upgrades, upsells, and pricing done at the tactical level.

Throughout the booking lifecycle, upsell opportunities can be offered at any touch point, for example, during the reservation confirmation process, via pre-arrival email blasts, at check-in, on property, and following check-out for the next stay (Peter, 2013). In the hotel industry, the most utilized way is traditionally to upsell during check-in when receptionists act as salespeople. With the development of online technology and a higher attention paid to improving hotels'

bottom line, online upselling today is gradually being adopted. It is mainly achieved through the strategies outlined in Table 3. First, hotel companies can develop their own online upselling systems, such as Marriott and Hyatt, that will send an instant upselling message at the completion of the initial booking. Second are the “eStandby Upgrade,” “eExpress Upgrade,” and “eReach” systems developed by Nor1 which incorporates upselling into the booking lifecycle. Third is Upsell Guru, where customers are offered an opportunity to bid for a better room compared to their initial booking. Fourth is Oaky, which focuses on sending personalized upselling message at the pre-arrival stage. Fifth is Upgrading.cc, where customers can check and select the upselling availabilities on the portal by themselves before their arrival. Another strategy is to use Porter & Sail, which can both send pre-arrival upselling emails and allow customers to buy additional items during their stay.

\*\*\* Please insert Table 3 about here\*\*\*

### **3. Methodology**

This study employs a mixed method approach to understanding how online upselling is used in the hotel industry. The reason for opting for a mixed method approach is to increase the validity of the findings on a topic, online upselling, that has not been subject of academic research in the hospitality industry (Hurmerinta-Peltomaki & Nummela, 2006) and to gain a deeper and broader understanding of online upselling in the hotel industry. This research is exploratory in its nature. A convergent parallel design is used where qualitative and quantitative data are collected in parallel, analyzed separately, and then merged (Creswell & Plano Clark, 2011). This design is selected to develop a more complete understanding of online upselling in a

hotel context by obtaining different but complementary data. Figure 1 explains the convergent parallel design employed in this study.

\*\*\* Please insert Figure 1 about here\*\*\*

Study 1 takes a qualitative approach to explore how online upselling programs can provide additional value over traditional revenue management practices. A qualitative approach is considered appropriate as there are no studies in the hospitality and tourism literature to guide the researcher on online upselling in the hotel industry. Study 2 adopts a quantitative approach to analyze customers' bidding patterns for superior room categories through secondary data. The purpose of using a mixed-method approach is to gain a more complete understanding of online upselling from customer and service provider perspectives.

### **3.1 Study 1**

Among interpretive frameworks that develop and shape the qualitative research (Guba & Lincoln, 1994), the paradigm guiding this study is post-positivism. Objectivist epistemology and critical realist ontology set the conceptual basis of this paradigm. Post-positivists recognize that their discoveries are partial segments or approximations of the truth and that it is near impossible to reach the truth (Clark, 1998). In the post-positivist approach, the researcher is external to the process and is an observer (De Haan, 2006), not a participant or creator. Data collected through in-depth interviews in Study 1 was analyzed using grounded theory. Grounded theory approach fits within the post-positivist paradigm (Denzin & Lincoln, 1994).

The main technique for obtaining qualitative information was in-depth interviews with hotel industry professionals familiar with online upselling. They were asked questions related to upselling in general, as well as online and offline upselling. Hotel industry professionals include revenue directors/analysts, consultants, front office managers, front office personnel, and sales and marketing directors. The criterion for inclusion was being very familiar with online upselling, either through using it themselves in their properties (for the cases of hotel personnel) or through providing consulting services on it (revenue management consultants). Various relevant positions were selected to explore the upselling issues from different perspectives. A total of 18 interviews were conducted between June–August 2018. Participants were recruited through the researcher’s personal network and the snowballing technique. Data collection was stopped after there were no new insights gained on online upselling efforts and upselling in general in the hotel industry.

Profiles of the respondents are presented in Table 4. They are based in different locations representing North America, Europe, and Asia with average of more than 11 years of work experience in the hotel industry. They use various online upselling systems, including UpsellGuru, Nor1, and in-house technologies developed by their companies. Apart from two revenue management consultants, all 16 hotels that participants work for implement front-desk upselling in conjunction with online upselling techniques.

\*\*\* Please insert Table 4 about here\*\*\*

Interview questions started with the participants’ background in the hotel industry and their familiarity with online and offline upselling industry techniques. After these warm-up

questions, participants were asked about the online upsell system they use, why they used it, how they use it, and how they benefit from it. Follow-up questions included matters related to implementing online and front-desk upselling simultaneously. Interview questions were slightly adjusted depending on the background of the participant, making the questions relatable to the participant's current position. For example, front office staff were asked questions on their feelings about their hotel implementing online upsell, how that influences their upselling efforts, and what factors they consider when they upsell at the front desk.

Interviews were conducted at the hotels/participant workplaces (six interviews) or through Skype (12 interviews) and lasted about an hour on average. The researcher conducted the interviews which were audiotaped and transcribed verbatim. The final data set consisted of 185 single-spaced pages of transcribed text. All interviews were conducted in English. NVivo was used for data organization.

Coding was done as the first and most fundamental process in grounded theory. Coding was carried out line-by-line for all transcribed interviews. Higher-level categories were then identified from the codes generated (Braun & Clarke, 2006). Frequency computation was the next step to identify the importance of the higher-level categories, as well as the dimensions for each of these themes (Creswell, 2008). For instance, if a participant mentioned that they used upsold revenue to measure the performance of upselling, a frequency of one was recorded on the "upsold revenue" dimension under the "measuring the performance of upselling" theme. Trustworthiness was satisfied through the researcher's subjectivity, confirmability, and transferability (Guba, 1990). The full spectrum of the participants' interpretations was examined to minimize the researcher's subjectivity. Repeated confirmation of interpretations was attained through data triangulation and participant checking (Krefting, 1991). It is required that the

investigation be transferable through its findings and fit similar contexts and repetition under similar circumstances. Detailed descriptions were recorded to ensure the transferability of the findings to similar and comparable contexts.

### **3.2 Study 2**

For Study 2, partnership was established with an independent hotel company to assess the existing functionality of online upgrades in the hotel industry compared to front-desk upselling. This hotel company uses UpsellGuru. The system works as follows: First a customer completes a hotel reservation through the hotel's website or online travel agencies. Second, prior to the guest's arrival (three days before arrival for this hotel), based on available inventory, the customer receives an automated email offering them a chance to bid for one or several different room types. Eligible customers include those that book directly and through online travel agencies. Customer segments such as corporate and government accounts are excluded from receiving online upsell offers. Customers can bid by moving a slider for one or more room types. Figure 2 presents a snapshot from UpsellGuru's system.

\*\*\* Please insert Figure 2 about here\*\*\*

The hotel sets minimum and maximum bid offers for each room type to upgrade. For example, if a guest booked a city view king room initially, they can bid anywhere between 240 HKD and 600 HKD per night to be upgraded from a city view king room to a harbor view king room. After the customer bids on one or more room types, the hotel decides to accept or deny the upgrade offer within 24 hours. If the offer is accepted, the customer is booked to the better room

type for the additional price (that they bid). If the offer is denied, their reservation remains the same. UpsellGuru also allows for cross-selling through the purchase of additional services, such as late check-out, breakfast, and early-check-in; however, this particular hotel company partnered does not implement cross-selling. The hotel pays about 10% commission for each upsell.

Online upselling data from this hotel was collected for February–August 2018 and was matched with customer profile data from the hotel’s property management system. Data collected include reservation number, arrival date, initial room type booked, new room type booked (referring to upsold room category), upsell amount, room revenue, food and beverage revenue, other revenue, actual room nights for this stay, reservation date, total arrivals (repeat versus non-repeat guests), gender, nationality, and age. Front-desk upselling statistics for 2015–2018 was also requested from the hotel.

This is a full-service independent hotel located in Hong Kong with 262 rooms. From the 262 rooms, 159 are standard rooms, 76 are club rooms, 26 are suite rooms, and one is a special suite room designed by an internationally renowned designer. This special suite is not included in the upselling system. The room types from the lowest to highest category are:

- City view king/twin room: 63/32
- Harbor view king/twin room: 60/4
- Club city view king/twin room: 28/4
- Club harbor view king: 44
- Studio suite king/twin room: 11/3
- Harbor suite king room: 12



## **4. Findings**

Findings from Study 1 are presented followed by findings from Study 2. The last section compares the findings from Studies 1 and 2. The comparisons are further discussed in the discussion section.

### **4.1 Study 1 Findings**

#### **4.1.1 Customer-related factors influencing the upsell**

Customer-related factors influencing the upsell, in both online and offline contexts, was mentioned by 11 participants in 41 instances. Participants agreed that only direct bookers and online travel agency (OTA) guests (from OTAs that provide the email address of the guests, such as Booking.com) are contacted for online upselling offers, and that the customer pool for front-desk upselling is larger. This is mainly due to the requirement that hotels have customers' email addresses in order to approach them with online upselling offers. The respondents did not differentiate between the characteristics of potential online and offline customers to upsell. The characteristics mentioned by respondents included leisure customers (compared to business customers), customers that are celebrating special occasions, international travelers (long-haul travelers compared to short-haul ones), couples (agents prefer approaching husbands compared to wives), older customers (compared to the younger ones), and first-time customers (compared to repeat customers). The quote below illustrates this perspective:

I think upselling is definitely easier with the first-time visitor, because with the repeated customer, they are more familiar with our hotel, and they know more about our hotel. If they really want an upgraded room, they would reserve it rather than just accepting the

upselling offer [at] our front desk. So, I think the first-time comer will be easier to approach. (Interviewee 8, Front Desk Supervisor, International hotel chain).

Other important variables hotels consider, especially for the online upselling decisions, are length of stay (whether the days correspond to high-demand or low-demand days), source of the booking (direct versus online travel agencies), and potential upsold revenue. One of the participants explains this perspective:

Because for UpsellGuru, maybe per day we will receive more than 50 requests, and then we are unable to evaluate all the backgrounds for each guest, we don't have that much resources to evaluate one-by-one. That's why the only important factor will be the source of booking and then the revenue we can receive. (Interviewee 13, Revenue Analyst, Independent hotel)

#### **4.1.2 Hotel-related factors influencing the upsell**

Hotel-related factors influencing the upsell were discussed by 10 participants 26 times. These factors include autonomy of the front desk agents (for the case of front-desk upselling) or revenue analyst (for the case of online upselling), communication across the front office, revenue management and customer relationship management departments, support by in-house management, and having the right technology. Interviewee 17, a Revenue Management Consultant for a hospitality consulting firm, explains:

I had highly successful upsell programs in place that [were] fully supported by the in-house teams (reservations and Front Desk) and did not require additional software installation to manage. Simply playing old-fashioned hospitality, serving the guests with the right offers at [the] time of booking or upon arrival (person-to-person) worked best.

Additional variables mentioned by the participants included the room size (customers prefer larger hotel rooms in general), club access (customers have free breakfast, afternoon tea, and cocktail hour), room view (most basic view versus city/sea/harbor view), and original room booking (most basic versus high-category rooms such as club floor rooms or suites). The logic here is that if the customer booked a basic room category, there are many better options for them during the upselling process, but those customers that booked the higher room categories, they are less likely to accept upselling offers. Below, an interviewee explains this perspective:

I tend to choose the customers that booked the most basic room category in our hotel.

Because for the basic room types, there's more difference to offer them with the higher room categories. For the room promotion, some of them include breakfast, and actually the guest whose reservation does not include breakfast will be easier for the upsell.

Usually for us, we like to upsell guest to club room, because they'll pay more. They can also use the club lounge, and actually they'll be more attractive to the guests. So, if it's not including the breakfast, we can ask them actually we are selling this price including breakfast, and then afternoon tea and evening cocktails. (Interviewee 5, Guest Relations Manager, Independent hotel)

#### **4.1.3 Online versus offline upselling**

Online versus offline upselling is discussed by 14 participants 32 times. Participants were asked their opinions on the effectiveness of online and offline upselling when they are implemented at the same time. Participants' opinions were divided on this topic, but the most popular response was that online and offline upselling are equally important. The participants that chose offline upselling over online upselling stated that front desk staff have access to a

larger customer base and that online upselling is more effective for those guests who are more tech savvy. The participants that preferred online upselling to offline upselling said that offline upselling is limited to one-day upselling based on the leftover inventory, whereas leftover room inventory can be more strategically sold through online upselling a few days before arrival. Below are two quotes exemplifying participants' perspectives on whether online and offline upselling efforts should go hand-in-hand:

I really think they [online and offline upselling efforts] should go hand-in-hand. A very strong online upsell effort needs to be supported by an offline effort. Sometimes online, all the action isn't quite enough to get the guests to make a decision. But if that is supplemented by a very well-trained agent when they arrive, again, I think that's still a little bit more personalized, right? That's why the online advertising is successful because it stops us and makes us feel like, you know, "Oh I have to buy this. I have seen it." That is the type of effort that I think we need. (Interviewee 16, Vice President of Business and Development, International hotel chain)

I think it should be integrated. Part of the customers are from the direct booking, but you do have other opportunities, like OTA guests, to upsell. Because normally for the direct booking, I think it's no more than 20% or 30%, so, in that case, online upselling will not capture all your potential customers. But in that case, you need to educate your subordinates well, to let them know what's going on. think...the integration [of] both methods...[would] be [best] with the proper trainings. With the other opportunities...at the same time, you need to educate how to handle [them]. For example, don't repeat upselling the guest. Because when TSA [company that offers training on front-desk upselling] was implemented in my hotel before, we received some complaints because

we tried so hard to upsell. For example...you already sent the email...asking the guests whether [they] want to upgrade [their] room, but [the] guest service agent asks it again, [and] that upsets the customer. (Interviewee 8, Front Desk Supervisor, International hotel chain)

#### **4.1.4 Advantages and drawbacks of online upselling**

The advantages and drawbacks of online upselling mentioned by the participants are listed in Table 5. Upselling systems participants used UpsellGuru, Nor1, and their own upselling systems. The most popular advantage is that online upselling systems give control to the customers. UpsellGuru in particular gives customers the opportunity to bid on higher room categories. Customer involvement in the upselling process is considered a part of relationship building with the customer.

“Bidding for upgrades is attractive to the guests. They bid themselves, then they’ll think it’s worth it, because, it’s not a price we give them, but it is the price they give us”

(Interviewee 5, Guest Relations Manager, independent hotel). Also,

Because, first of all, they have to really understand what the bidding means. The bidding means you choose the price, and I’m the one who agree it or deny it. But when you check in...I am offering you a price, then it’s the guest who [agrees] or [denies] it. So, it’s totally two different stories. (Interviewee 4, Duty Manager, independent hotel)

Respondents also stated that it is not unusual for hotels to overbook their lowest room category, which would then lead to forced upgrades during check-in. Therefore, another advantage is that an online upselling system results in less free or forced upgrades.

\*\*\* Please insert Table 5 about here\*\*\*

Among the drawbacks mentioned by the participants, the most frequently mentioned one is related to the price of higher room categories being more expensive at the front desk compared to online upsell offers. Interviewee 6, a guest services supervisor at an independent hotel, explains this issue:

Some guests miss our email about [an] upselling opportunity through UpsellGuru and then when they [come] and try to ask for a cheaper rate [similar to the amount that they would win the bid] to do the upgrade. But we have a standard upgrade charge at the front desk, so this might cause them a little bit of disappointment.

Participants stated that there is a possible negative effect of online upselling on front office upselling performance. However, the views on this is debatable among the participants. Participants supporting the negative effect explain that customers that are likely to accept the upsell offers at the front desk already accept the online upselling offers. Therefore, there is less opportunity to upsell at the front desk. Participants opposing this view explain that online customers who book direct or OTA customers (from OTAs that provide customer email addresses) typically account for 20–30% of total customers. Online upselling offers are sent to, at most, 30–40% of the total customer base. Therefore, there is still more than 50% of customers that front office staff can approach for upselling during check-in.

#### **4.1.5 Measuring upselling performance**

Upsold revenue and upsold room nights are the most common upselling performance measure mentioned by the participants, followed by click rate and conversion rate. Click rate

refers to the percentage of the customers that click on the online upsell offer sent by the hotel. Conversion rate was interpreted in two different ways by the respondents. For those who focused on online upselling, conversion rate refers to the percentage of the customers that respond to online upselling initiatives. For those respondents who focused on upselling in general, conversion rate refers to the percentage of revenue or arrivals that are upsells. Other measures included the most popular room type to upsell, number of upsells, average upsell price of each offer, upsell revenue generated per agent, and the ratio of online and offline upsells.

#### **4.1.6 Future of upselling**

Participants' opinions of the future of upselling centered around customization and personalization of the upselling offers. Personalization is related to the collection of customer-related data from all touchpoints and presenting tailor-made upselling offers to the customers based on customers' previous behaviors. Customization is about presenting customers with upselling options, such as better room views, higher floor, distance from the elevator, reserved amenities, etc., and lets the customer choose the options that they would like. For both customization and personalization of the upsell offer, the most critical need is the ability to capture customer-related data successfully and apply data analytics to turn data into decisions. The most basic example given by the participants was that even today, most hotels do not combine customer-related data from a restaurant point of sales system with the property management system data. Most hospitality industry professionals do not have the skillset and technology knowhow to combine customer-related data from all touchpoints. A partnership with vendors that specialize in data analytics is recommended to overcome this challenge.

## 4.2 Study 2 Findings

Table 6 shows front-desk upselling revenues compared with online upselling revenue in 2018, 2017, and 2016. The study hotel did not implement online upselling in February–August 2016–2017 but did use both front-desk upselling and online upselling between February–August 2018. Upselling revenues are higher in 2018 compared to 2016–2017. Although overall online upselling revenue is higher than front-desk upselling revenue, it does not seem that online upselling had a negative influence on front-desk upselling revenue. In fact, in May, June, and July, front-desk upselling revenue is higher than online upselling revenue for this hotel.

\*\*\* Please insert Table 6 about here\*\*\*

\*\*\* Please insert Figure 3 about here\*\*\*

Figure 3 shows the upsell movements from the most popular upsell to the least popular ones. In the graph, the sum of categories less than 3% are collapsed into the “other” category. With 117 counts, the most popular upsell is from a standard room with a city view to a standard room with a harbor view. Overall, upsells from standard rooms to club access rooms have the highest frequency with 246 counts. A comparison of the initial room booking and upsold room categories is presented in Table 7. **There were 466 instances of online upselling between February-August 2018 periods.** Customers’ bids for superior room category rooms increase the utilization of the higher room categories, such as studio suite and harbor suite rooms. About 55% of the initial room bookings are standard city view rooms, which is the most basic room type in this hotel.



\*\*\* Please insert Table 7 about here\*\*\*

Table 8 presents descriptive statistics on customer characteristics. Apart from these variables, data on gender, repeat guests, market segments, and regions were also collected. Males make up 67% of the sample and about 85% of the sample are first-time customers to this hotel. Third party channels make up about 44% of the sample while direct bookings are about 56%. European customers are the largest in the sample, with 37%, followed by Asian (30%), and North American (14%) customers.

\*\*\* Please insert Table 8 about here\*\*\*

To explain what factors might influence successful bids by customers, regression analysis is adopted. The independent variables are length of stay, booking window, age of the customer, repeat guest (dummy variable, 0 = first time customer, 1 = repeat guest), gender (dummy variable, 0 = female, 1 = male), view of initial room booking (dummy variable, 0 = city view, 1 = harbor view), and suite upsell (dummy variable, 0 = not a suite upsell, 1 = suite upsell). The rationale for including the initial room booking's view is the finding from upsell movements in Figure 3. It is evident that upsells from standard city view to harbor view rooms are popular. Suite upselling is included, as these are the most superior upsold room types in the hotel. Model and variable selection is limited to the data availability.

The regression model explains 37% of the variance in the upselling bids per night (Table 9). The F-ratio of 39.448 is significant at the 0.01 level. Multicollinearity is checked through variance inflation factors (VIFs). VIFs are far below the cut-off point of 10, as suggested by

Myers (1986). The Durbin-Watson statistic value of 2.050 indicates that there is no residual correlation in the model.

\*\*\* Please insert Table 9 about here\*\*\*

Two variables are statistically significant in the model: view from initial room booking and suite upsell. Beta values are standardized coefficients. This implies that customers with a harbor view initial room booking, compared to customers with a city view initial booking, have higher upselling bids, controlling for other independent variables. One plausible explanation for this is that customers that booked city view room as their initial booking are more price conscious and do not bid as much as those customers that initially booked a higher category room than the standard room with a city view. The second significant variable is suite upsell. Customers that are upsold to a suite room have higher upselling bids. This is reasonable, as the suite rooms tend to be more expensive compared to other room categories. This exploratory analysis of secondary data on customers' successful online upselling bids indicate that there is not a statistically significant relationship between upselling bids per night and age, gender, repeat guests, length of stay and booking window.

#### **4.3 Comparison of Study 1 and Study 2 Findings**

Findings indicate that online and front-desk upselling strategies at hotels are separated, and not aligned with each other. For example, the upselling rate at the front desk is different than the online upselling rate, which is likely to influence guest perceptions negatively. The importance of a fair upselling mechanism was discussed by Gallego and Stefanescu (2009). A

potential solution to this problem is for hotels to develop cross-channel, meaning both offline and online, upselling objectives and strategies that are in line with each other. The following quotes illustrate this point:

You can just go to booking.com and see how much they offer you for the upsell. Because in our hotel, for example, for the city view to the harbor view room, it costs \$240 plus 10% service charge. That means \$264. But you can see [on] booking.com, the city view room compared to the harbor view room, [is] just a hundred something different.

(Interviewee 7, Assistant Guest Services Supervisor, Independent hotel)

Study 2 shows that online and front-desk upselling implemented at the same time brought the highest upselling revenues to the hotel compared to previous years. This is an indication that there are revenue opportunities using both upselling techniques and that online upselling did not replace front-desk upselling, at least for the time being. One plausible explanation is that the type of customers that choose to bid for upselling or accept a hotel's upselling offers might be different from those customers that respond positively to front-desk upselling offers. Hotels can identify these differences and preferences only through collecting customer data from all sources and analyzing this data to provide personalized upselling offers, either through email or in person during check-in at the front desk, depending on their preference.

There were conflicting results from Studies 1 and 2 in terms of the characteristics of customers that are more likely to accept upselling offers. For example, participants from Study 1 indicated that older customers are more likely to accept upselling offers, or it is easier to upsell to older customers. In Study 2, age was not a significant variable in explaining the upsell amount per night (customer bids per night for superior room categories). Similarly, Study 1 participants

stated that it is relatively easier to upsell to new customers compared to repeat customers.

However, this variable was not significant in explaining the upsell amount per night.

Participants' perspectives on the future of upselling focused mostly on the importance of collecting guest data from all touchpoints and creating a wider platform for customized, personalized, and unique upselling strategies. The following quote emphasizes this point:

Hotels should collect data on the guests [beyond market segment, LOS, lead time, or demographics]. Once you know why your guests chose to stay at your hotel, what their preferences are, you can create a better upsell strategy. I don't think that there's a one-size-fits-all strategy. During conversations with reservations or front office agents, this type of information is often provided, but not always recorded. However, once the agent knows, they can also offer upsell based on what information the guest provided.

(Honeymoon = upgrade to suite with a view, business trip = early check-in and late check-out, in-room amenity.) There should be a set of offers already available...either online or via the agents, and these offers should be presented to the guests based on the guests' needs and expectations. (Interviewee 17, Revenue Management Consultant, Consultancy firm)

\*\*\* Please insert Figure 4 about here\*\*\*

As a solution to the issues discussed in this section, a new approach to upselling in the hotel industry is recommended in Figure 4. Omni-channel is a term that originated from retailing (Rigby, 2011; Verhoef, Kannan, & Inman, 2015). Marketing efforts from a multichannel approach are moving towards a new way of marketing where the distinctions between the

physical and online will become blurred and eventually vanish and customers will be addressed through multiple channels that organically exchange information with each other (Brynjolfson, Hu, & Rahman, 2013; Verhoef et al., 2015). The omni-channel approach enables an integrated, seamless experience across multiple devices and touchpoints. Rigby (2011) stated that through an omni-channel, customers experience a brand rather than a channel within a brand. The essence of this approach is in its focus on the single view of the customer in coordinated and strategic ways. Although the omni-channel approach has many potential applications in the hospitality industry, the focus of this discussion is the omni-channel approach in regard to upselling.

In the hotel industry, current upselling channels include introducing the upsell offer right after booking the room online, on the phone when customers call to book, through email a few days before arrival, or during check-in at the front desk. These multiple channels are available to the customer but not integrated in the present business model. In the omni-channel approach to upselling, all channels are connected. Data collected from each source is streamlined to create a single-view of the customer. The data that the omni-channel delivers is beneficial in driving upselling decisions that further revenue management objectives. For example, knowing that a particular customer does not like email communication, the hotel would not attempt to upsell that customer through email and instead try front-desk upselling to avoid upsetting or annoying the customer. In another example, the hotel would know which customers were approached for bidding for superior room categories three days before arrival and denied the upsell due to their low bids. This way, front office personnel can plan how to approach these customers for other upselling or cross-selling offers during check-in.

Collecting omni-channel data would allow hotels to track customer behavior online and offline, providing an opportunity to suggest personalized valuable offers and upsell incentives no matter the format a customer prefers. Omni-channel data can be leveraged to form the basis for many revenue management-related decisions besides upselling. By aligning all their upselling communication channels (online and offline), hotels can better upsell and cross-sell their customers.

## **5. Conclusion**

This study used a mixed-methods approach to understand on how online upselling is used in the hotel industry as a part of revenue management strategy. As the first study of its kind in upselling in the hotel industry, it is mostly exploratory on the current applications of online upselling and how it can be used as a part of revenue management strategies. Through in-depth interviews with hospitality industry professionals and analysis of secondary data on customer bids for superior room categories, the study revealed that no matter how important online upselling channels are, they are not a replacement for offline (in-person) front-desk upselling. In fact, contemporary customers make purchase decisions that unfold over multiple touchpoints, including online and offline channels (Verhoef et al., 2015). Therefore, an omni-channel approach to upselling was introduced to tackle the fragmented nature of multiple-channel upselling communications to provide customers with seamless, consistent information and experience across these channels.

### **5.1 Theoretical Contributions**

The findings of this study lead to a range of contributions to existent literature. First, it adds to the understanding of upselling as a part of revenue management strategies. Although upselling is indisputably important to revenue management to further optimize revenues, it has rarely been the subject of academic research (Heidig et al., 2017; Norvell et al., 2018). This study is the first attempt to problematize the fragmented nature of multichannel upselling communications, which should expand the currently understudied literature on upselling in the hospitality industry. Second, findings showing the fragmented nature of multichannel upselling communications should be contextualized in the wider area of multichannel communications between hospitality companies and customers. The findings and recommended omni-channel approach have important implications for the hospitality and tourism industries beyond upselling. Further insight is needed on the question if it is viable to implement this recommended retail industry approach (Rigby, 2011; Verhoef et al., 2015) in the hospitality and tourism industries. Wider application of this concept should be contextualized. Third, this research adds to the overall conceptualization of upselling in the hospitality industry and offers empirical support to show the complex nature of upselling. Focusing on upselling as a part of revenue management strategies, this study shows that additional value over traditional revenue management practices can be realized if an omni-channel approach to upselling is possible. This furthers the implications of applying this concept.

## **5.2 Practical Implications**

Among the practical implications of this study, perhaps the most important one is the need to move away from treating each upselling channel as independent. Instead, hospitality industry professionals should focus on a more unified approach across channels to create a single

view of the customer and align all marketing efforts in upselling across these channels. This approach will enable customers to migrate from an online upselling channel to front-desk upselling without the problems identified in this study. The hospitality industry should take the retail sector as an example to understand how they can successfully implement this concept.

Study findings also show the importance of data collection on customers that go beyond the strategies hotels implement now. Without proper data collected on customers regarding their preferences through both online and offline means, it is not possible to implement an omni-channel approach to upselling. Important customer data to be collected from various touchpoints should be identified, and employees that are involved in offline data collection, such as front-line staff at the hotel, should be trained on the methods and importance of this data collection process.

Regardless of the importance of online channels in the hotel industry, this study shows that there is still room for upselling at the front desk during check-in, implying that online upselling is not likely to replace front-desk upselling at this time. Study 1 indicated that front office personnel do not receive enough specialized, regular training in upselling. Hotels are encouraged not to ignore the importance of front-desk upselling and continue investing in it but to have this channel streamlined with other upselling channels.

### **5.3 Limitations and Future Research**

This study has several limitations. Secondary data for the study was collected from only one hotel that implements UpsellGuru. It has been challenging to find hotel partners to share data from upselling and property management systems. It would be better to collect data from more



hotels that implement other online upselling systems, including Nor1, Oaky, Upgrading.cc, and in-house technologies. Future studies can provide more insight into how customers react to online upselling offers through these different online upselling technologies.

Another limitation is related to the secondary data provided by the hotel. Although data related to successful customer bids were provided, customer and bidding data related to unsuccessful bids was not provided. Customer characteristics for those with successful and unsuccessful bids can be compared to examine whether there are any differences between these two groups based on socio-demographic backgrounds and customer profiles.

An additional area for future research is related to those customers that respond to online upselling offers versus those who prefer front-desk upselling. The sample hotel used in Study 2 had very comparable online and front-desk upselling revenues, which implies that there is room for the development and utilization of both upselling techniques. However, this finding should be interpreted with caution as the evidence is from only one hotel. Future research should be done to understand the customer dynamics on online versus front-desk upselling.

Despite its contributions, in many ways, this research opens up more questions than it actually answers about upselling in the hospitality industry. Future research is needed to further our understanding of how online and offline upselling methods can be aligned and streamlined. From a general revenue management perspective, future studies should investigate how customer data can be collected and utilized to generate a single view of the customer from all distribution channels.

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Table 1. Upselling definitions

| Author(s)              | Definitions  |
|------------------------|--|
| Heidig (2012)          | Customers are offered the opportunity to revise their initial decision in return for a superior but more expensive service option.       |
| Khwaja & Yang (2014)   | Convincing customers at (or close to) the point of consumption to choose a higher value alternative that is more profitable to the firm. |
| Ni, Shen, & Zhu (2015) | Refers to the practice of selling more expensive items, add-ons or other products or services to an existing customer.                   |
| Peter (2013)           | Upselling entails offering your hotel and resort guests additional services and amenities for an additional charge.                      |
| Sharma & Sharma (2015) | Upselling is a simple technique of offering the customer the opportunity to purchase additional items for a better experience.           |

Table 2. Empirical studies on upselling

| Authors                     | Industry Context          | Focus   | Main Findings  |
|-----------------------------|---------------------------|---|--|
| Bohutinsky (1990)           | Airline                   | To assess the potential benefits and costs of upsell by developing and testing upsell strategies in an actual airline environment.        | The upsell strategy should be flight specific. And it is found that upsell behavior is mostly prevalent in the upper-fare classes while being almost nonexistent in lower-fare classes.  |
| Kim & Kim (1999)            | Life Insurance            | Introduce a methodology of measuring the customer-specific upselling potential.   | More than half of life insurance customers have upselling potential to buy an additional 25% worth of premium products.  |
| Gallego & Stefanescu (2009) | Service Industry          | Investigate the interaction effect between pricing flexibility and customer demand on revenues.   | The fairness criterion can be achieved by introducing a limited cascading model, of which the essential conditions to obtain the same optimal revenue as the full cascading model are presented. Moreover, upgrades and upsells can be helpful in increasing revenue when business constraints are imposed or product margins are heterogeneous.   |
| Heidig (2012)               | Hotel, Car Rental         | To develop a conceptual model of the upselling decision process and to empirically clarify when and why consumers may accept such offers. | The extensive cognitive effort provokes a lock-in situation that lowers guest willingness to accept upsell offer. Furthermore, the anticipated inaction regret and decision justifiability play a mediating role, while surrogate shoppers' initial investment also matters.   |
| Khwaja & Yang (2014)        | Car Rental                | Investigates whether or not employee engagement has an impact on upselling effectiveness in the car rental service industry.              | Employees who actively interact with customers and care about customer-centric issues have a larger influence on upselling. Additionally, employee engagement has a greater impact on upselling effectiveness for transactions made by business and weekend users.   |
| Cui et al. (2017)           | Hotel                     | The benefit of using conditional upgrade.   | Conditional upgrades can generate more revenue than dynamic pricing, improve demand-supply matching for the hotel, assist hotels in setting prices optimally, offer flexibility in managing capacity allocations, and optimize demand segmentation.  |
| Yilmaz et al. (2017)        | Hotel                     | Examine how and when standby upgrades can provide additional revenue for a hotel.   | Standby upgrades can generate revenue when: 1) guests are myopic, while hotel property has high premium-to-standard ratio; 2) guests are strategic, while hotel property has low premium-to-standard room ratio.   |
| Heidig (2017)               | Hotel, Car Rental, Retail | Conceptualize upselling as a two-stage decision process where the process of making the first decision affects the final decision.        | The first study shows that cognitive effort spent in customers' initial choice has a moderating effect on upsell messages that use different goal frames. The second study indicates that only when customers feel responsible for the outcome of the final decision will they be affected by a different goal frame.  |
| Norvell et al. (2018)       | Restaurant                | Evaluates customers' post-purchase attitudinal and behavioral responses to upselling and down-selling in retail industry.                 | Upselling improves short-term revenues at the cost of customers' attitudinal responses and their future patronage. In contrast, down-selling sacrifices the short-term revenue while gaining a superior customer satisfaction and brand loyalty in return, which may lead to higher revenue in the long run. Besides, value and quality have a mediating effect on the impact of suggestive selling. |

Table 3. Typical online upselling systems

| Company                    | Year Founded | Headquarters               | Employee Number on LinkedIn | Sample Brands Using It   |
|----------------------------|--------------|----------------------------|-----------------------------|--|
| Hotel Own System           | N/A          | N/A                        | N/A                         | Marriott International; Hyatt Hotels Corporation                                   |
| Nor1 <sup>a</sup>          | 2004         | Santa Clara, United States | 78                          | AccorHotels; Wyndham Hotels and Resorts; Intercontinental Hotels Group; Highgate   |
| UpsellGuru <sup>b</sup>    | 2015         | Frankfurt am Main, Germany | 6                           | Hotel ICON; Alila Hotels and Resorts; Penta Hotels                                 |
| Oaky <sup>c</sup>          | 2013         | Amsterdam, Netherland      | 23                          | Radisson Blu Hotel Amsterdam; Grand Hotel Amr ath Amsterdam; Hotel Rival Stockholm |
| Upgrading.cc <sup>d</sup>  | 2016         | Singapore                  | 4                           | Dorsett Hotels and Resorts   |
| Porter & Sail <sup>e</sup> | 2014         | New York, United States    | 34                          | Warehouse Singapore; Chambers Hotel New York; Hotel Camiral Barcelona              |

Note: <sup>a</sup> Data obtained from LinkedIn profile (<https://www.linkedin.com/company/nor1/>); Company website (<http://www.nor1.com/our-partners>);

<sup>b</sup> Data obtained from LinkedIn profile (<https://www.linkedin.com/company/upsell-guru/>); Company website (<https://www.upsellguru.com/>);

<sup>c</sup> Data obtained from LinkedIn profile (<https://www.linkedin.com/company/oaky/>), Company website (<https://oakyapp.com/>);

<sup>d</sup> Data obtained from LinkedIn profile (<https://www.linkedin.com/company/upgrade.cc/>); Company website (<https://www.upgrading.cc/web/Home.aspx>);

<sup>e</sup> Data obtained from LinkedIn profile (<https://www.linkedin.com/company/porter-sail/>); Company website (<https://www.porterandsail.com/>).

Table 4. Participant information

| <b>Participant</b> | <b>Position</b>                                   | <b>Hotel/Business category</b> | <b>Years of experience</b> | <b>Online upselling system</b> | <b>Location</b> |
|--------------------|---|--------------------------------|----------------------------|--------------------------------|-----------------|
| Interviewee 1      | Director of Rooms                                 | Independent hotel              | 26                         | UpsellGuru                     | Hong Kong       |
| Interviewee 2      | Front Office Manager                              | Independent hotel              | 18                         | UpsellGuru                     | Beijing         |
| Interviewee 3      | Guest Service Agent                               | Independent hotel              | 2                          | UpsellGuru                     | Singapore       |
| Interviewee 4      | Duty Manager                                      | Independent hotel              | 8                          | UpsellGuru                     | Hong Kong       |
| Interviewee 5      | Guest Relations Manager                           | Independent hotel              | 4                          | UpsellGuru                     | London          |
| Interviewee 6      | Guest Services Supervisor                         | Independent hotel              | 8                          | UpsellGuru                     | Paris           |
| Interviewee 7      | Assistant Guest Services Supervisor               | Independent hotel              | 5                          | UpsellGuru                     | Hong Kong       |
| Interviewee 8      | Front Desk Supervisor                             | International hotel chain      | 6                          | Nor1                           | Hong Kong       |
| Interviewee 9      | Cluster Revenue Director                          | International hotel chain      | 4                          | In-house technology            | Guangzhou       |
| Interviewee 10     | Director of Sales, Marketing & Revenue Management | Independent hotel              | 20                         | UpsellGuru                     | Hong Kong       |
| Interviewee 11     | Cluster Director of Revenue Management            | International hotel chain      | 13                         | In-house technology            | Shanghai        |
| Interviewee 12     | Revenue Optimizer Specialist                      | Consultancy firm               | 25                         | UpsellGuru /Nor1               | Bangkok         |
| Interviewee 13     | Revenue Analyst                                   | Independent hotel              | 2                          | UpsellGuru                     | Hong Kong       |
| Interviewee 14     | Regional Director of Revenue and Distribution     | International hotel chain      | 22                         | Nor1                           | Miami           |
| Interviewee 15     | Sales Manager                                     | International hotel chain      | 4                          | In-house technology            | New York        |
| Interviewee 16     | Vice President of Business and Development        | International hotel chain      | 17                         | Nor1                           | Boston          |

|                |   |                           |    |                          |           |
|----------------|---|---------------------------|----|--------------------------|-----------|
| Interviewee 17 | Revenue Management Consultant                         | Consultancy firm          | 18 | Nor1/in-house technology | New York  |
| Interviewee 18 | Group Director of Revenue Management and Distribution | International hotel chain | 6  | UpsellGuru               | Singapore |

Table 5. Advantages and drawbacks of online upselling

| Advantages  | Frequency | Drawbacks   | Frequency |
|---|-----------|---|-----------|
| Customers are in control  | 7         | Price of higher room categories can be more expensive at the front desk compared to online upsell offers  | 9         |
| Less free or forced upgrades  | 6         | Negative effect of online upselling on front office upselling performance                                 | 7         |
| Enable and increase customer engagement   | 2         | Loyalty programs against online upselling offerings (which entitles higher-tier members to free upgrades) | 4         |
| Front office can focus on customer service rather than upselling                            | 2         | Glitches in the online interface of the upselling system with the property management system              | 2         |
| Customers have more time to respond to the upselling offer compared to front-desk upselling | 1         | Not every customer opens the online upselling message   | 2         |
| Quick and convenient for the customers  | 1         | Not all customer segments are reached for online offers   | 1         |
| Technically easy to incorporate the online upselling system during the reservation process  | 1         | Club operations are stressed due to club upsells  | 1         |
|   |           | Online upselling photo and description does not match the actual upsold room                              | 1         |
|   |           | Management of upselling program adds burden to reservation team   | 1         |

Table 6. Front-desk upselling revenue compared with online upselling revenue

|                 | <i>Online upselling revenue—2018</i> | <i>Front-desk upselling revenue—2018</i> | <i>Front-desk upselling same time—2017</i> | <i>Front-desk upselling same time—2016</i> |
|-----------------|--------------------------------------|--|--|--|
| <b>February</b> | 128,830                              | 40,440                                   | 36,950                                     | 36,700                                     |
| <b>March</b>    | 162,801                              | 100,080                                  | 62,200                                     | 42,110                                     |
| <b>April</b>    | 125,494                              | 82,500                                   | 55,400                                     | 41,160                                     |
| <b>May</b>      | 95,966                               | 112,710                                  | 21,150                                     | 25,090                                     |
| <b>June</b>     | 79,796                               | 89,310                                   | 21,200                                     | 50,750                                     |
| <b>July</b>     | 74,282                               | 110,570                                  | 22,656                                     | 47,500                                     |
| <b>August</b>   | 89,199                               | 40,080                                   | 30,400                                     | 31,200                                     |
| <b>Total</b>    | 756,368                              | 575,690                                  | 249,956                                    | 274,510                                    |

Note: Revenues are listed in Hong Kong dollars.



Table 7. Comparison of initial room booking and upsold room categories

| <b>Room type</b>                               | <b>Initial room</b> | <b>Upsold room</b> | <b>% change</b> |
|--|---------------------|--------------------|-----------------|
| Standard city view room (36 m <sup>2</sup> )   | 225                 | 0                  | /               |
| Standard harbor view room (36 m <sup>2</sup> ) | 141                 | 116                | -17.73%         |
| Club city view room (36 m <sup>2</sup> )       | 19                  | 33                 | 73.68%          |
| Club harbor view room (36 m <sup>2</sup> )     | 36                  | 46                 | 27.78%          |
| Club harbor view room (38 m <sup>2</sup> )     | 26                  | 134                | 415.38%         |
| Studio suite room (65 m <sup>2</sup> )         | 19                  | 56                 | 194.74%         |
| Harbor suite room (80 m <sup>2</sup> )         | 0                   | 81                 | /               |

Table 8. Descriptive statistics on customer characteristics

| <i>Variables</i>                 | <i>Mean</i> | <i>Min</i> | <i>Max</i> | <i>Std. dev.</i> |
|----------------------------------|-------------|------------|------------|------------------|
| <i>Age</i>                       | 42.30       | 18.00      | 76.00      | 11.67            |
| <i>Booking window</i>            | 52.73       | 3.00       | 323.00     | 57.22            |
| <i>Length of stay</i>            | 2.91        | 1.00       | 12.00      | 1.76             |
| <i>Upsell amount per night</i>   | 563.84      | 100.00     | 2,943.00   | 430.39           |
| <i>Room revenue</i>              | 7,839.03    | 794.91     | 59,637.78  | 5,876.93         |
| <i>Food and beverage revenue</i> | 1,466.03    | 0.00       | 14,845.45  | 1,547.77         |
| <i>Total revenue</i>             | 10,365.35   | 1,443.17   | 77,053.92  | 7,656.29         |

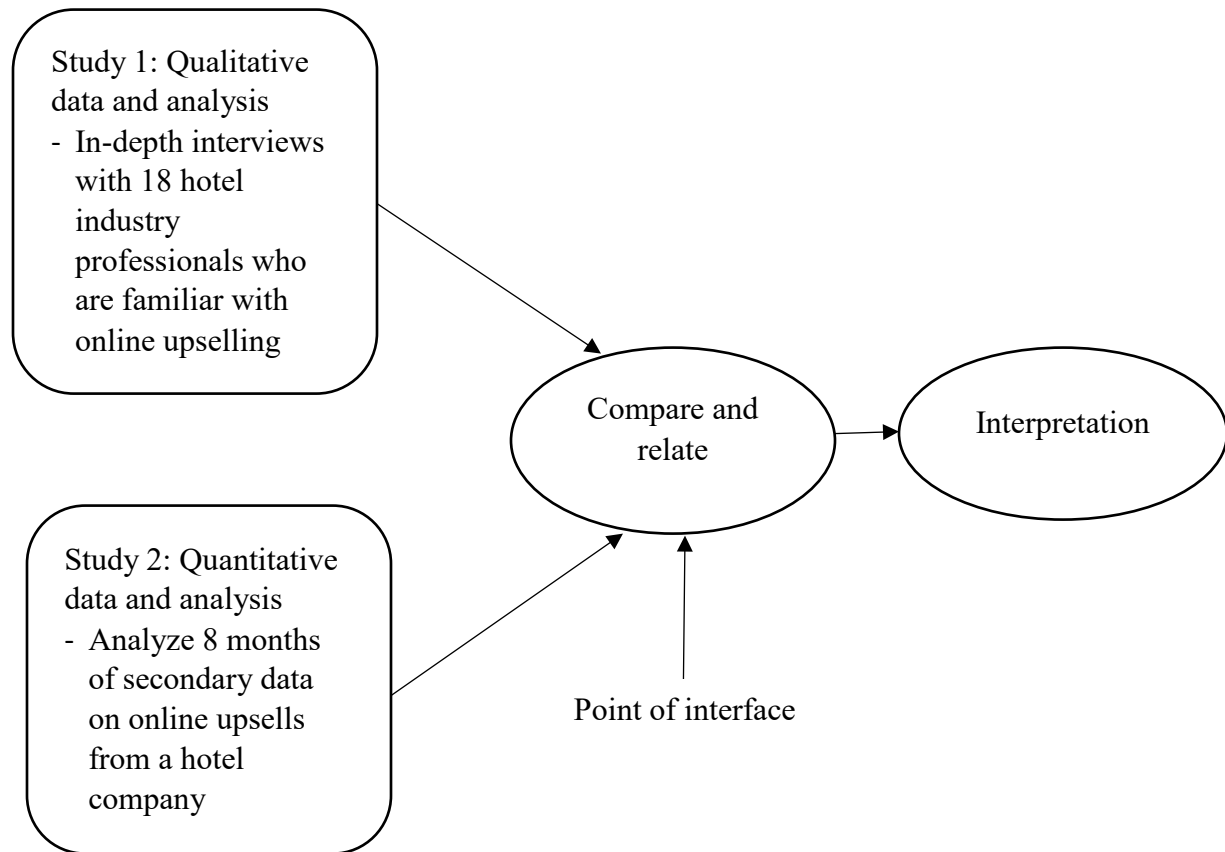
Note: Age refers to the age of the customer. Booking window is the period between the time of booking and arrival date. Length of stay is the number of nights during the trip. Upsell amount per night refers to the bid amount a customer made for a successful upsell. Room, food and beverage, and total revenue refer to the revenue generated from this customer during this trip.

Table 9. Regression results—Upselling bids per night

| <b>Variable</b>              | <b>Beta</b> | <b>Tolerance</b> | <b>VIF</b> | <b>t-statistic</b> | <b>p</b> |
|------------------------------|-------------|------------------|------------|--------------------|----------|
| Length of stay               | 0.008       | 0.960            | 1.041      | 0.209              | 0.835    |
| Booking window               | 0.010       | 0.950            | 1.053      | 0.273              | 0.785    |
| View of initial room booking | 0.075*      | 0.884            | 1.132      | 1.896              | 0.049    |
| Suite upsell                 | 0.577*      | 0.894            | 1.118      | 14.712             | 0.000    |
| Age                          | -0.063      | 0.943            | 1.061      | -1.649             | 0.100    |
| Gender                       | 0.011       | 0.948            | 1.055      | 0.292              | 0.770    |
| Repeat guest                 | 0.060       | 0.964            | 1.037      | 1.586              | 0.114    |
| R <sup>2</sup>               | 0.380       |                  |            |                    |          |
| Adjusted R <sup>2</sup>      | 0.370       |                  |            |                    |          |
| F-value                      | 39.448      |                  |            |                    |          |

Note: \*p < 0.05

Figure 1. Convergent parallel design



Note: Adapted from Creswell & Plano Clark (2011).

Figure 2. UpsellGuru screenshot

### Superior Room



- Enjoy more space with 50 sq meter of living space.
- Luxury double beds with down duvets for maximum sleep comfort.
- Bathrooms with shower and bathtub.
- Amazing city views

Total Additional Amount



- 74 EUR +

Skip

### Junior Suite



- Enjoy more space with 70 sq meter of living space.
- Separate living room with comfortable couch.
- Luxury double beds with down duvets for maximum sleep comfort.
- Located on the top floor with a private balcony and amazing views

Total Additional Amount

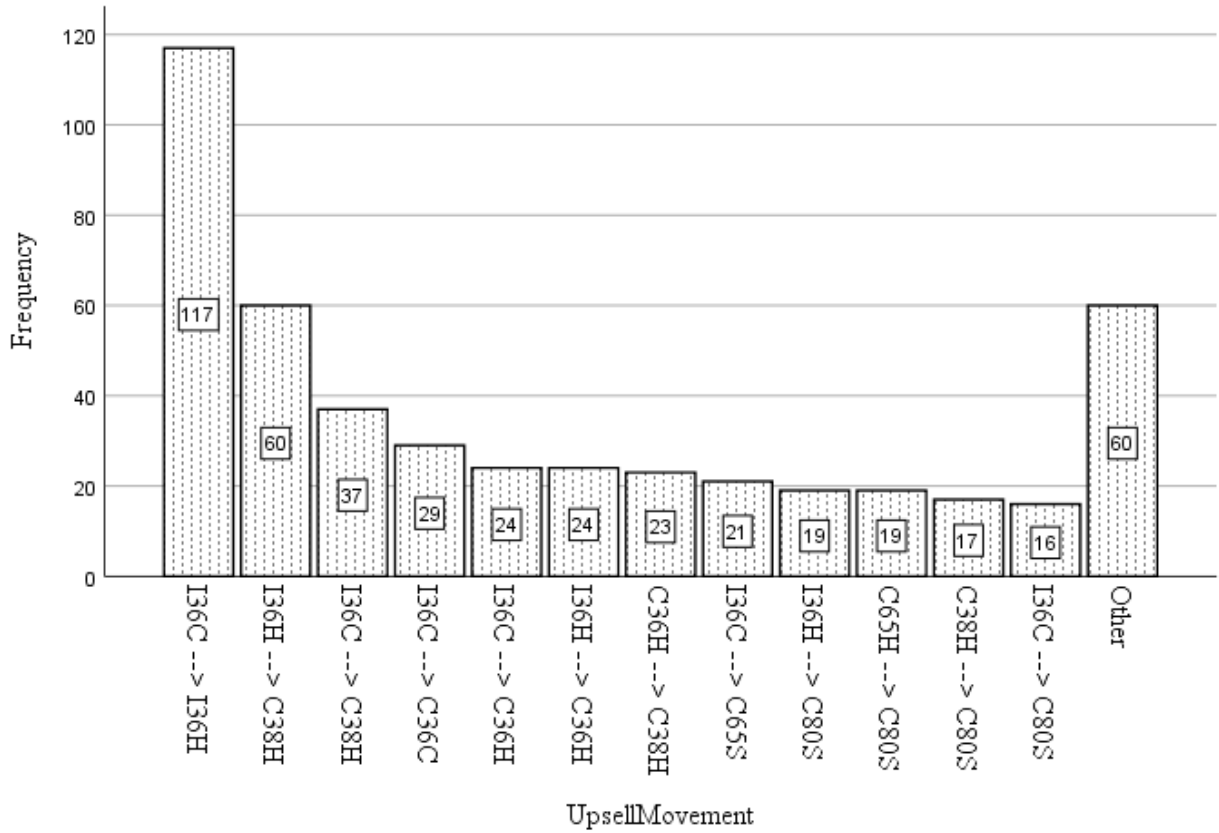


- 166 EUR +

▶ Next

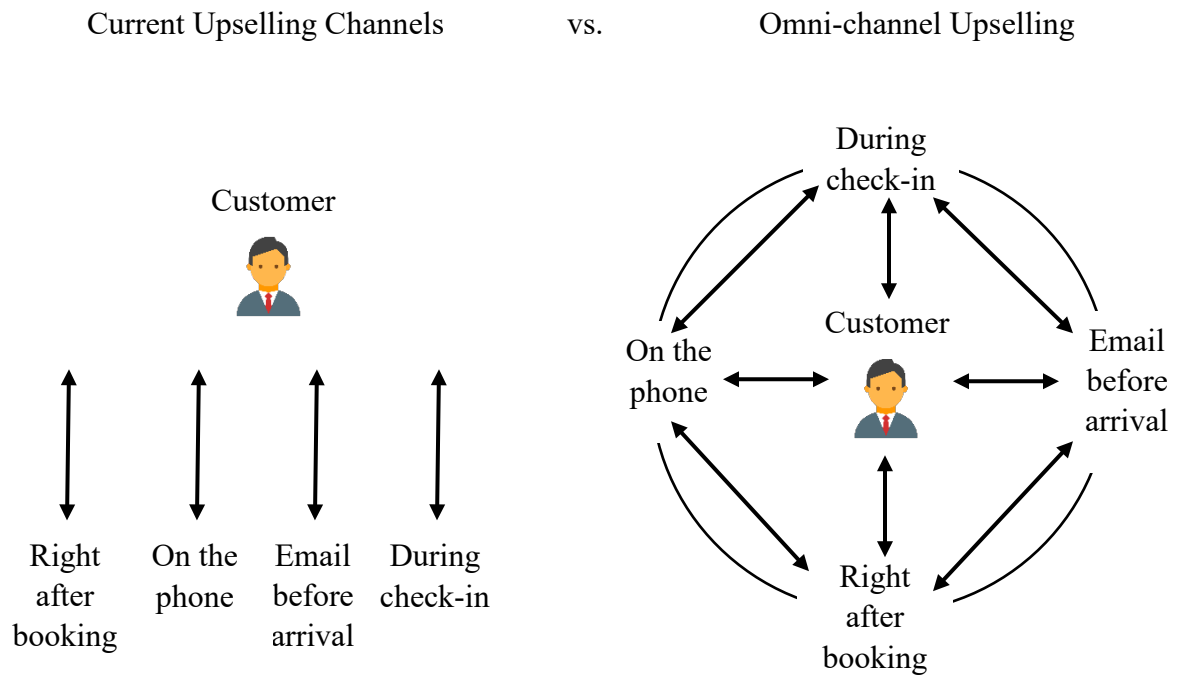
Source: HotelTechReport, 2018

Figure 3. Upsell movements across room types



Note: 36, 38, 65, and 80 refer to room size in square meters. I versus C refers to standard rooms versus rooms with club floor access. S refers to suite rooms. C versus H refers to city view versus harbor view rooms. For example, an upsell movement of I36C → C65S means a room upsell from a standard 36 m<sup>2</sup> room with city view to a 65 m<sup>2</sup> suite with club floor access.

Figure 4. Omni-channel approach to upselling



## Highlights

- Online and front-desk upselling strategies at hotels are separated, and not aligned with each other.
- An omni-channel approach to upselling can tackle the fragmented nature of multichannel upselling communications.
- Through an omni-channel approach, the hotel industry can develop personalized and streamlined upselling strategies.