Will Guests Say "I DO" Again

SURVEY REPORT: A look at the use of technology by hotel guests and how it impacts their overall stay satisfaction and re-booking intentions.

A service of HFTP Hospitality Financial and Technology Professionals

Authors:

Agnes DeFranco, Ed.D., CHAE, CHE, CHIA, CAHTA

Minwoo Lee, Ph.D., MBA, CHE, CHIA

TABLE OF CONTENTS

Hospitality Financial and Technology Professionals
Global Headquarters: 7301 Ranch Rd 620 N, Ste 155-193
Austin, Texas 78726 • United States
+1 (512) 249-5333 • (800) 646-4387 *(US only)* • *www.hftp.org*

AUTHORS

Agnes DeFranco, Ed.D., CHAE, CHE, CHIA, CAHTA is a professor and Conrad N. Hilton Distinguished Chair at the Conrad N. Hilton College, University of Houston in Houston, Texas USA. Her areas of expertise are: finance, accounting, hospitality education, problem solving/decision-making, catering management and convention management. DeFranco is the co-author of seven textbooks and has published more than 115 refereed articles. She is an HFTP Global past president and a recipient of the HFTP Paragon Award.

adefranco@uh.edu

Minwoo Lee, Ph.D., MBA, CHE, CHIA is an assistant professor at the Conrad N. Hilton College, University of Houston in Houston, Texas USA. His areas of expertise are: big data and business analytics, machine learning, impact of IT in hospitality and tourism management, service innovation and persuasion, and customer decision-making in social media. He is the author of more than 25 peer-reviewed journal articles, book chapters and trade articles in hospitality, tourism and information systems areas; editorial board member for the leading hospitality and tourism journals.

mlee37@uh.edu

INTRODUCTION

A business' economic goal is to be profitable; and in the case of publicly held companies, to increase the value of the company for its stockholders. In order to achieve this goal, businesses look at ways to improve their products and services to increase guest satisfaction and ensure repeat business. Yet, recruiting and attracting customers is not its only primary goal. Also crucial is customer retention. These goals are one and the same for the hotel industry.

The hotel business is very competitive and has a tight profit margin. Technology is everywhere in a modern hotel. Technology in 2021 and beyond is not only about in-room Wi-Fi or booking a hotel room online. It is also about connecting guests' own entertainment content through their personal devices during their stay, or robots delivering room service or extra towels to a guestroom. It is about having a digital personal assistant such as Alexa to answer questions about the weather or what time the restaurant closes. It is about being able to use voice command to order room service, dim the lights or set an alarm in the morning. The list of guest-facing technology is quite long. Plus now hotel companies are leaning on technologies to limit personal contact in support of social distancing. ***This leads us to ask: are our guests satisfied with these new technologies?*** Does technology satisfaction carry over to the overall satisfaction of the hotel stay? More importantly, would guests rebook with the same hotel company in the future?

REACHING OUT TO OUR GUESTS

This study aims at assessing the use of technology by our guests and how this may impact their overall stay satisfaction and re-booking intentions. A nationwide sample was collected using the service of an online panel data vendor. All participants were 18 years or older and had to have stayed at a hotel in the last 24 months. Typically the time period criterion for these types of surveys is 12 months; but because of the timing of this study *(early August 2020)*, the time period was extended due to the fact that many hotels had been closed for a few months and travel restrictions had been largely in place for much of 2020. A total of 1,002 surveys were collected.

The respondents were asked to complete an online questionnaire which included inquiries on basic demographic and travel behavior. Since the survey was about guest-facing technology in hotels, the respondents were then asked about their technology use, specifically if they were open to or had any anxiety or concerns about using technology in general. Since not everyone is technologically savvy, the respondents were then asked to recall from their latest hotel stay whether use of the hotel's technology was voluntary, and if the hotel helped in facilitating the use of the technology. The participants were then presented with a battery of questions regarding their satisfaction of the guest-facing technology, the satisfaction of their hotel stay and whether they would make any unplanned purchases of either any of the guest-facing technology they used during the stay or any hotel services. Finally, the participants were asked the most important set of questions: how they would relate their hotel stay experience to others and whether they would rebook with the hotel. Ready? Let's take a look.

OUR GUESTS AND THEIR TRAVELS

The 1,002 individuals who stayed at a hotel in the 24 months preceding the end of July 2020 participated in this study with 56.8 percent of them being female and 43.2 percent male. As shown in the demographic chart below, the age distribution was fairly even with age 60 or older at 25 percent, followed by the 40–49 age group at 21.6 percent. Most of the participants (40.8 percent) had a household income of $50,001 to $100,000, and the majority (54.5 percent) earned at least a bachelors, graduate or professional degree.

The travel pattern of the participants was quite interesting (details at right). Almost a quarter of the respondents (24 percent) traveled and stayed at a hotel seven to nine months prior to the study, which was before the pandemic. In fact, only 19.4 percent stated that they had stayed in a hotel "less than three months ago" and another 21 percent stayed at a hotel "three to six months ago." The vast majority of the stays were within the United States (90.3 percent), at a hotel brand that they had stayed at previously (70.9 percent), and 42.7 percent are members of the loyalty program of the hotel where they stayed.

Most of the respondents traveled either exclusively for leisure (55.5 percent) and mostly for leisure (22.8 percent); they therefore traveled mostly one to two times per year (45.4 percent) and three to six times per year (24.3 percent), for a duration of two to three nights (57.7 percent) and four to seven nights (25 percent). As for the hotel of choice, Upper Midscale won the prize at 31.3 percent, followed by Upper Upscale at 23.1 percent and Upscale at 21.8 percent.

Table 1 // Respondent Data

AGE		60 or older, 25%	
40–49, 22%	50–59, 20%	30–39, 18%	18–29, 16%

GENDER	Female, 57%	Male, 43%

HOUSEHOLD INCOME	$50,001–$100,000 • 41%
$50,000 or less • 34%	$100,001–$150,00 • 16%
$150,001–$200,00 • 7%	> $200,000 • 3%

EDUCATION	Bachelor's degree • 35%
High School diploma • 26%	Associate degree • 17%
Master's degree • 16%	Other • 6%

Table 2 // Travel Behavior

MOST RECENT TRIP	7–9 months ago, 24%
10–12 months ago, 22%	3–6 months ago, 21%
<3 months ago, 19%	>12 months ago, 14%

DESTINATION	Within US, 90%
North America/Caribbean, 5%	Europe/Middle East/Africa, 2%
Asia Pacific, 1%	Other, 1%

STAYED WITH THIS HOTEL BRAND PREVIOUSLY	
Yes, 71%	No, 29%

MEMBER OF LOYALTY PROGRAM	No, 50%
Yes, 43%	This hotel does not have one, 7%

HOTEL STAY FREQUENCY	1–2 times a year, 45%
3–6 times a year, 24%	< Once a year, 23%
7–12 times a year, 8%	>12 times a year, 3%

DURATION OF A TYPICAL STAY	2–3 nights, 58%
4–7 nights, 25%	1 night, 15%
8–14 nights, 2%	>14 nights, 0.4%

CLASS OF HOTEL	Upper Midscale, 31%
Upper Upscale, 23%	Upscale, 22%
Midscale, 13%	Economy, 7% | Luxury, 4%

PURPOSE OF TRAVEL	Exclusively leisure, 56%
Mostly leisure, 23%	Combined business and leisure, 13%
Mostly business, 6%	Exclusively business, 2%

TECHNOLOGY: FRIEND OR FOE?

To have an understanding of how our guests feel about technology, they were asked to rate eight statements on a scale of 1 to 7 with "1" being *Strongly Disagree* to "7" being *Strongly Agree*. Of the eight statements, two of them reflected positive sentiments (thus higher scores indicate more favorable) and six projected some level of difficulties and hesitation (thus they are reverse coded and therefore lower scores are preferred). The reason why more negative statements were posed is because if something is wrong, and our guests are not using the technology, we would want to know why and then take actions to rectify the situation.

For the two positive statements, our guests did rate them high, signifying that they were confident that they could learn technology-related skills (5.96) and were able to keep up with important technological advances (5.10). With a mean score of 4 being neutral, anything in the range of 2 to 3 translates to disagreement with the statement. For the six reversely coded statement, five of them are within this range with one, "I feel apprehensive about using technology," resulting in a 3.47 rating. By giving low scores, this means our guests did not have much difficulty in understanding most technological matters (2.77), were not afraid to use the technology in hotels fearing that they might damage the technology (2.80), or make mistakes that they could not correct (2.98), had not avoided the use of technology (2.84), and were not confused by technological terminology (3.03). Indeed, with technology being such an essential part of our daily lives, the general public is more attune to the use of technology in many situations and environments.

Table 3 // Technology Usage

POSITIVE STATEMENTS	Mean
I am confident I can learn technology-related skills.	5.96
I am able to keep up with important technological advances.	5.10

NEGATIVE STATEMENTS *(reverse coding – lower scores preferred)*	Mean
I have difficulty understanding most technological matters	2.77
When given the opportunity to use technology in hotels, I fear I might damage it in some ways.	2.80
I have avoided technology because it is unfamiliar to me.	2.84
I hesitate to use hotel technology for fear of making mistakes I cannot correct.	2.98
Technological terminology sounds like confusing jargon to me.	3.03
I feel apprehensive about using technology.	3.47

Scale: "1" Strongly Disagree to "7" Strongly Agree

TECHNOLOGY AND LAST HOTEL STAY

While our guests are open to the use of technology, whether hotels require their guests to use these guest-facing technologies or how hotels deploy such technology can still affect guests' satisfaction. At the end, we human beings like to make our own decisions, for the most part. Again, using a scale of 1 to 7 with "1" being Strongly Disagree to "7" being Strongly Agree, our guests reported that the use of all these guest-facing technologies was voluntary (see Table 4 on page 6). And, even if such technology might be helpful, the choice was still in the hands of the guests. The scores of 5.57 to 5.76 confirmed such practices. It is wise of hotels to do so. Even with the current pandemic status, and many hotels deploying even more technology options to maintain and enhance social distancing, using the technology is always optional.

Even so, our guests only "somewhat agree" (5.12) that hotels provided guidance or had a person available (5.04) for assistance in using these hotel technologies and their associated applications. And it appeared that hotels were also not providing specialized instructions for using the technologies and their applications (4.90). It would be a shame if hotel companies spend so much research and development efforts to deploy a technology that guests end up not using — not because they don't want to, but that guests would just want to have a bit more direction as to how to use them. Thus, hotels may want to revisit their guest-facing technology deployment strategies. Think about this, if a hotel is installing a new system, there is always some training for its employees to use it properly, right? Then how about assisting the guests to use the technology hotels deploy for checking in and out, ordering room services, making spa appointments or tee time?

ARE GUESTS HAPPY WITH TECHNOLOGY IN HOTELS? YES!

Let's celebrate! Overall, our guests were happy with the guest-facing technologies they experienced in our hotels (5.42). However, with 7 being the maximum score, the score of 5.42 can definitely be improved. Just as with anything we do, we should never be satisfied with an above average score, right? Why be happy with a B when you can get an A, and especially if the A can mean more income for the hotel?

To understand the guests' experience, we asked the respondents to rate four continuums of different descriptors regarding their guest-facing technology usage experience. As seen in Table 5 at right, the respondents gave a score of 5.72 from bad to good meaning their experience leaned more towards good. The same can be said for unpleasant to pleasant (5.64) and unfavorable to favorable (5.59). And, just to make sure, one item was coded inversely from beneficial to harmful and the respondents did give that item a score of 2.89, indicating that they believed their experience with the guest-facing technologies in hotels had been beneficial.

So far so good. But, did these positive experiences with guest-facing technologies translate to a positive hotel stay? Another YES!! The respondents gave all five statements ratings of over 5 (5.13 to 5.97), they were happy (5.97) and satisfied (5.96) with the experience they had at the hotel.

Table 4 // Technology and Last Hotel Stay

VOLUNTARY VS. MANDATORY	MEAN
My use of the hotel technology is voluntary.	5.76
My hotel stay does not require me to use the hotel technology.	5.67
Although it might be helpful, using the hotel technology is certainly not compulsory during my hotel stay.	5.57
DEPLOYMENT OF TECHNOLOGY	
The hotel has guidance available for me to use hotel technology and its applications.	5.12
The hotel has a person available for assistance for hotel technology.	5.04
The hotel has specialized instruction available for using hotel technology and its applications.	4.90

Table 5 // Guest Satisfaction: Technology and Overall

Overall satisfaction of guest-facing technologies after usage	5.42
GUEST EXPERIENCE WITH GUEST-FACING TECHNOLOGIES	
Bad ←→ Good	5.72
Unpleasant ←→ Pleasant	5.64
Unfavorable ←→ Favorable	5.59
Beneficial ←→ Harmful*	2.89
HOTEL STAY	
I am happy with the experience I have had at my hotel stay.	5.97
I have been satisfied with my experiences at my hotel stay.	5.96
I truly enjoy my hotel stay.	5.83
Staying at the hotel has been delightful.	5.51
I am elated with experiences I have had at my hotel stay.	5.13

Scale: "1" Strongly Disagree to "7" Strongly Agree | *Indicates inverse coding.

HAPPINESS = SPENDING DOLLARS?

One item that hoteliers always want to know is: okay, it is great that my guests are happy, but does it mean they will spend more money in my hotel when they are happy? And, with all the hotel choices in the marketplace, will my guests come back and stay with my hotel again? Indeed, this is a million-dollar question. If hotels are spending resources in technologies to make the guest experience more memorable, more satisfied and happier, of course hotels would like to see what the return on investment is.

However, from these 1,002 individuals, unplanned spending was not at the top of their mind. Now, this may be due to the current pandemic as there are still so many unknowns. It will be interesting to see if these scores will be higher in the future. From the table at right, the scores of all the unplanned purchases, both of guest-facing technologies and hotel services, were below the average score of 4 where the highest score was 3.64 and was recorded for "unplanned purchases of food and beverage, in room dining and souvenirs."

Yet, technology can definitely induce spending. In China, the FlyZoo hotel, owned by Alibaba, is keyless and cashless. It is sort of an experimental hotel for Alibaba to test many of its own technology *(Saiidi, 2019)*. By the way, if you want to buy a technology item or a number of items you see or use in the hotel room, the purchase is facilitated simply by taking a picture of the item and you will be directed to Alibaba.com for shopping and purchase (*YellRobot, 2019)*. So, perhaps hotels need to have some technology to facilitate unplanned purchases. Seriously, if you see a photo of a lovely dessert and you can order it via your phone by taking a photo and have it delivered to your room, maybe, just maybe, you would want to have that with an espresso, cappuccino, or a glass or even a bottle of wine.

While the spending may not be happening at a rate that hotels would like to see, happy guests do help with hotel promotion, especially through word of mouth, and this includes social media marketing. Seven re-booking and promotion actions were queried of the respondents. When their stays were positive, guests would say positive things about the hotel (5.70) and recommend others to stay when their advice is sought (5.69). They were also more apt to encourage friends and relatives to patronize the hotel brand (5.55), to consider the hotel for their own future stay (5.44) and to even stay at the hotel brand in their next trip (5.40). However, our guests were still very prudent with

Table 6 // Unplanned Purchases and Return Stay

UNPLANNED PURCHASES OF TECHNOLOGY ITEMS	
On this trip, I saw a number of guest-facing technologies I wanted to buy even though they were not on my shopping list.	2.99
During this hotel stay, I saw a number of guest-facing technologies I wanted to buy even though they were not on my planned lists.	2.94
I experienced a number of sudden urges to buy guest-facing technologies that I had not planned to purchase on this trip.	2.82
UNPLANNED PURCHASES OF HOTEL SERVICES	
I experienced a number of sudden urges to purchase items such as food, beverages, in-room dining, souvenirs that I had not planned to purchase during this hotel stay.	3.64
During this hotel stay, I saw a number of goods or services I wanted to buy even though they were not on my planned lists.	3.28
I experienced a number of sudden urges to purchase hotel services such as spa treatments, on-demand movies, that I had not planned to purchase in this hotel stay.	2.70
WHAT WILL GUESTS DO?	
I will say positive things about this hotel brand.	5.70
I will recommend others to stay at this hotel brand if someone seeks my advice.	5.69
I will encourage friends and relatives to stay at this hotel brand.	5.55
I will consider this hotel brand my first choice for my future trip.	5.44
I will stay at this hotel brand in my next trip.	5.40
I will continue to stay with this hotel brand if the price is increased slightly.	4.81
I will pay a higher price to stay with this hotel brand then staying at other hotel brands.	4.27

Scale: "1" Strongly Disagree to "7" Strongly Agree

their spending and only gave a score of 4.81 where they would stay with the hotel if the price was increased slightly, and an even lower score of 4.27 where they would pay a higher price to stay with this hotel than at another brand.

Moreover, it is also confirmed via statistical inferences that guests who gave higher overall satisfaction score for guest-facing technologies, also recorded higher the overall hotel stay scores, higher unplanned purchases scores in both technology items and hotel services, and also higher guest re-booking intentions scores as well. These positive relationships all confirm that technology is an integral part of our guests' satisfaction.

UNCOVER THE NUGGETS OF HIDDEN TREASURE

While it is good to know how our guests rate their unplanned purchasing and rebooking behavior, we also know that in marketing, the shot gun approach or mass marketing is not as effective as targeted marketing. The fact that Marriott has 30 brands, Hyatt has 20 brands, Hilton has 18 brands, etc., shows that individual brand characteristics appeal to different guests for different reasons. Therefore, sub-groups analyses were performed on all four demographic characteristics in Table 1 and all eight travel behaviors in Table 2 in order to uncover where the significant differences are hidden in the three areas of: unplanned purchases of guest-facing technologies, hotel services and guests' behavioral intentions. In other words, do demographic characteristics and travel behavior cause any difference in opinions in the guests' unplanned purchases of guest-facing technologies,

Table 7 // UNPLANNED PURCHASES OF TECHNOLOGY ITEMS

On this trip, I saw numerous guest-facing technologies I wanted to buy even though they were not on my shopping list.
OVERALL SCORE: 2.99

Gender		Male: 3.20	Female: 2.80			
Age		18–29: 4.09	30–39: 3.39	40–49: 3.15	50–59: 2.43	60+: 2.08
Most Recent Trip	<3 mos: 3.02	3–6 mos: 3.47	7–9 mos: 3.02	10–21 mos: 2.76		>12 mos: 2.51
Stayed at Hotel Before		Yes: 3.18	No: 2.52			
Stays Per Year		<1: 2.25	1–2: 3.06	3–6: 3.44	7–12: 3.57	>12: 2.84
Length of Stay (Nights)		1: 2.22	2–3: 3.10	4–7: 3.21	8–14: 2.75	>14: 2.75
Hotel Class/Scale	Luxury: 4.33	Upper Up: 3.71	Upscale: 2.92	Upper Mid: 2.62	Midscale: 2.67	Economy: 2.25
Purpose of Travel	Exclusively Business: 3.48	Mostly Bus.: 3.53	Combined: 4.14	Mostly Leisure: 3.17	Exclusively Leisure: 2.54	

During this hotel stay, I saw numerous guest-facing technologies I wanted to buy even though they were not on my planned list. | **OVERALL SCORE: 2.94**

Gender		Male: 3.13	Female: 2.80			
Age		18–29: 4.01	30–39: 3.65	40–49: 3.14	50–59: 2.38	60+: 2.20
Most Recent Trip	<3 mos: 2.88	3–6 mos: 3.49	7–9 mos: 3.05	10–21 mos: 2.67		>12 mos: 2.44
Stayed at Hotel Before		Yes: 3.13	No: 2.49			
Stays Per Year		<1: 2.19	1–2: 3.05	3–6: 3.43	7–12: 3.28	>12: 2.52
Length of Stay (Nights)		1: 2.11	2–3: 3.05	4–7: 3.20	8–14: 2.80	>14: 2.50
Hotel Class/Scale	Luxury: 4.33	Upper Up: 3.67	Upscale: 2.89	Upper Mid: 2.58	Midscale: 2.58	Economy: 2.17
Purpose of Travel	Exclusively Business: 3.52	Mostly Business: 3.43	Combined: 3.96	Mostly Leisure: 3.18	Exclusively Leisure: 2.52	

I experienced numerous sudden urges to buy guest facing technologies that I had not planned to purchase on this trip.
OVERALL SCORE: 2.82

Gender		Male: 3.07	Female: 2.63			
Age		18–29: 3.91	30–39: 3.51	40–49: 2.94	50–59: 2.28	60+: 1.96
Most Recent Trip	<3 mos: 2.89	3–6 mos: 3.32	7–9 mos: 2.84	10–21 mos: 2.55		>12 mos: 2.36
Stayed at Hotel Before		Yes: 2.99	No: 2.40			
Stays Per Year		<1: 2.16	1–2: 2.85	3–6: 3.32	7–12: 3.38	>12: 2.36
Length of Stay (Nights)		1: 2.17	2–3: 2.93	4–7: 2.95	8–14: 2.75	>14: 3.50
Hotel Class/Scale	Luxury: 3.83	Upper Up: 3.47	Upscale: 2.73	Upper Mid: 2.50	Midscale: 2.57	Economy: 2.26
Purpose of Travel	Exclusively Business: 3.52	Mostly Business: 3.48	Combined: 3.87	Mostly Leisure: 2.89	Exclusively Leisure: 2.44	

hotel services, and guests' behavioral intentions? The results are presented in Tables 7, 8 and 9 respectively, where items with significant differences are included (pages 8–11).

FOR UNPLANNED TECHNOLOGY PURCHASES…

Table 7 (page 8) shows the three unplanned purchases of guest-facing technologies. First, their overall scores from Table 6 are listed for each statement, followed by the scores of the sub-groups. Only scores that are statistically and significantly different from other groups are shared here. While the female gender is traditionally stereotyped to enjoy shopping more than their male counterpart, for unplanned guest-facing technologies, male guests seemed to be more interested. There was also a difference in age where the younger the age group, the higher the interest in purchasing unplanned guest-facing technologies. Additionally, the group that reported their last hotel stay between three to six months was more inclined to be interested, and so are those who stayed at that particular hotel before. This is also true for those who stayed at luxury and upper upscale hotels for the combined purpose of business and leisure. Although the length of stay also showed a difference in interest of unplanned guest-facing technologies, those staying for four to seven nights recorded the highest average scores for wanting to buy the guest-facing technology during their trip and during their hotel stay while those who stayed for over 14 days had the highest score for having a number of sudden urges for these unplanned purchases. Interestingly, income,

Table 8 // SIGNIFICANT DIFFERENCES IN UNPLANNED PURCHASES OF HOTEL SERVICES

I experienced a number of sudden urges to purchase items such as food, beverages, in room dining, souvenirs that I had not planned to purchase in this hotel stay | **OVERALL SCORE: 3.64**

Age		18–29: 4.95	30–39: 4.26	40–49: 3.63	50–59: 3.00	60+: 2.87
Most Recent Trip	<3 mos: 3.53	3–6 mos: 3.98	7–9 mos: 3.79	10–21 mos: 3.39		>12 mos: 3.42
Stayed at Hotel Before		Yes: 3.74	No: 3.41			
Stays Per Year		<1: 3.00	1–2: 3.85	3–6: 3.92	7–12: 3.96	>12: 2.52
Length of Stay (Nights)		1: 2.91	2–3: 3.66	4–7: 4.00	8–14: 4.00	>14: 4.25
Hotel Class/Scale	Luxury: 4.65	Upper Up: 4.23	Upscale: 3.67	Upper Mid: 3.32	Midscale: 3.29	Economy: 3.14
Purpose of Travel	Exclusively Business: 3.10	Mostly Bus.: 3.98	Combined: 4.49	Mostly Leisure: 3.70	Exclusively Leisure: 3.37	

During this hotel stay, I saw numerous goods or services I wanted to buy even though they were not on my planned list. **OVERALL SCORE: 3.28**

Age		18–29: 4.47	30–39: 3.80	40–49: 3.48	50–59: 2.62	60+: 2.50
Most Recent Trip	<3 mos: 3.13	3–6 mos: 3.62	7–9 mos: 3.38	10–21 mos: 3.20		>12 mos: 2.96
Stayed at Hotel Before		Yes: 2.83	No: 2.39			
Stays Per Year		<1: 2.64	1–2: 3.42	3–6: 3.66	7–12: 3.68	>12: 2.36
Length of Stay (Nights)		1: 2.47	2–3: 3.30	4–7: 3.75	8–14: 3.00	>14: 3.00
Hotel Class/Scale	Luxury: 4.33	Upper Up: 4.01	Upscale: 3.16	Upper Mid: 3.00	Midscale: 2.95	Economy: 2.52
Purpose of Travel	Exclusively Business: 2.96	Mostly Business: 3.65	Combined: 4.18	Mostly Leisure: 3.45	Exclusively Leisure: 2.96	

I experienced a number of sudden urges to purchase hotel services such as spa treatments, on-demand movies, that I had not planned to purchase in this hotel stay. | **OVERALL SCORE: 2.70**

Age		18–29: 3.95	30–39: 3.32	40–49: 2.81	50–59: 1.83	60+: 2.11
Most Recent Trip	<3 mos: 2.66	3–6 mos: 3.09	7–9 mos: 2.81	10–21 mos: 2.44		>12 mos: 2.41
Destination	US: 2.64	NA/Carib.: 3.42	So. Am.: 2.67	Asia: 3.70	EMAF: 2.87	Others: 3.36
Stayed at Hotel Before		Yes: 3.42	No: 2.96			
Stays Per Year		<1: 2.16	1–2: 2.76	3–6: 3.11	7–12: 3.06	>12: 1.92
Length of Stay (Nights)		1: 2.03	2–3: 2.72	4–7: 3.08	8–14: 2.50	>14: 2.25
Hotel Class/Scale	Luxury: 4.00	Upper Up: 3.38	Upscale: 2.73	Upper Mid: 2.30	Midscale: 2.34	Economy: 2.08
Purpose of Travel	Exclusively Business: 2.83	Mostly Business: 3.12	Combined: 3.82	Mostly Leisure: 2.88	Exclusively Leisure: 2.31	

Scale: "1" Strongly Disagree to "7" Strongly Agree

education level and membership in a loyalty program did not make any differences in their attitudes in unplanned purchases. The categories that received the top mean score are highlighted (See Table 7, page 8).

FOR UNPLANNED HOTEL SERVICES PURCHASES…

Similar to unplanned guest-facing technologies purchases, income, education level and membership in a loyalty program did not indicate any differences in the ratings. Unlike guest-facing technologies, gender did not make a difference for unplanned purchases of hotel services. As shown in Table 8 (page 9), the results are almost identical to the unplanned purchase behavior for guest-facing technologies. Guests of the younger the age group were more inclined to purchase unplanned hotel services (4.95 for the 18–29 age group for food and beverages and in-room dining). Perhaps it is the familiarity factor, if guests stayed in the hotel before, they were also more prone to have unplanned hotel services purchased. Guests who traveled for both business and leisure and also those who stayed in luxury and upper upscale properties would make unplanned hotel services purchases more often than the other groups.

FOR REBOOKING INTENTIONS TOWARDS THE HOTEL…

Any hotel would love to have its guests spend more onsite. On the other hand, most travelers, if not all, also have a certain budget. So, while unplanned purchases generally received lower scores, it was very promising that the rebooking

Table 9 // GUESTS' BEHAVIORAL INTENTIONS IN THE FUTURE

I will say positive things about this hotel brand. | **OVERALL SCORE: 5.70**

Most Recent Trip	<3 mos: 5.76	3–6 mos: 5.77	7–9 mos: 5.73	10–21 mos: 5.75		>12 mos: 5.38
Stayed at Hotel Before		Yes: 5.87	No: 5.30			
Loyalty Program Member		NA: 5.62	Yes: 6.00	No: 5.45		
Stays Per Year		<1: 5.36	1–2: 5.74	3–6: 5.86	7–12: 6.09	>12: 5.84
Length of Stay (Nights)		1: 5.19	2–3: 5.76	4–7: 5.84	8–14: 6.15	>14: 5.00
Hotel Class/Scale	Luxury: 6.25	Upper Up: 6.03	Upscale: 5.68	Upper Mid: 5.62	Midscale: 5.53	Economy: 4.98

I will recommend others to stay at this hotel brand if someone seeks my advice. | **OVERALL SCORE: 5.69**

Most Recent Trip	<3 mos: 5.70	3–6 mos: 5.77	7–9 mos: 5.78	10–21 mos: 5.74		>12 mos: 5.34
Stayed at Hotel Before		Yes: 5.85	No: 5.31			
Loyalty Program Member		NA: 5.42	Yes: 5.96	No: 5.50		
Stays Per Year		<1: 5.36	1–2: 5.74	3–6: 5.82	7–12: 6.06	>12: 5.84
Length of Stay (Nights)		1: 5.23	2–3: 5.76	4–7: 5.78	8–14: 5.85	>14: 5.75
Hotel Class/Scale	Luxury: 5.98	Upper Up: 5.97	Upscale: 5.72	Upper Mid: 5.63	Midscale: 5.56	Economy: 5.00

I will encourage friends and relatives to stay at this hotel brand. | **OVERALL SCORE: 5.55**

Most Recent Trip	<3 mos: 5.54	3–6 mos: 5.70	7–9 mos: 5.67	10–21 mos: 5.51		>12 mos: 5.19
Stayed at Hotel Before		Yes: 5.72	No: 5.17			
Loyalty Program Member		NA: 5.36	Yes: 5.81	No: 5.36		
Stays Per Year		<1: 5.16	1–2: 5.63	3–6: 5.70	7–12: 5.89	>12: 5.64
Length of Stay (Nights)		1: 5.03	2–3: 5.64	4–7: 5.63	8–14: 5.90	>14: 4.75
Hotel Class/Scale	Luxury: 6.20	Upper Up: 5.89	Upscale: 5.57	Upper Mid: 5.46	Midscale: 5.41	Economy: 4.65

I will consider this hotel brand my first choice for my future trip. | **OVERALL SCORE: 5.44**

Most Recent Trip	<3 mos: 5.44	3–6 mos: 5.65	7–9 mos: 5.5	10–21 mos: 5.4		>12 mos: 5.07
Stayed at Hotel Before		Yes: 5.66	No: 4.89			
Loyalty Program Member		NA: 5.36	Yes: 5.82	No: 5.13		
Stays Per Year		<1: 4.98	1–2: 5.51	3–6: 5.64	7–12: 5.94	>12: 5.52
Length of Stay (Nights)		1: 4.89	2–3: 5.52	4–7: 5.51	8–14: 6.15	>14: 5.75
Hotel Class/Scale	Luxury: 6.03	Upper Up: 5.88	Upscale: 5.36	Upper Mid: 5.31	Midscale: 5.31	Economy: 4.66

Scale: "1" Strongly Disagree to "7" Strongly Agree

intentions scores were high. Who are the groups that gave higher scores than others? Table 9 (pages 10–11) lists the seven behavioral intentions, again first will the overall scores, and then the scores of the sub-groups where the scores are statistically significantly different from other groups.

None of the four demographic characteristics show any differences in the behavioral intentions except one. Age is the one demographic factor that noted a difference where the two younger age groups are willing to pay a higher price to stay with the same hotel brand than staying at other hotels.

When looking at the travel behavior, it did not matter where in the world the guests stayed, the destination also did not affect the guests' behavioral intentions. And the purpose of travel only affected one rebooking intention, where those who traveled exclusively for business was the most loyal and, similar to the young age groups, would pay a higher price to stay with the same hotel brand.

For the other remaining six travel behaviors, statistically significant differences were found between the groups in their rebooking intentions. First, for guests who last stayed at a hotel three to six months ago (at the time of the survey, which was right during the pandemic) were those who would recommend the hotel to others, stay at this hotel brand in their next trip and even continue to stay with this brand if the price increased slightly, or pay a higher price than staying at another brand. This sentiment is shared unequivocally if these guests stayed at the hotel before (4.50 to 5.87) or are members of the hotel's loyalty pro-

Table 9 // GUESTS' BEHAVIORAL INTENTIONS IN THE FUTURE *(continued)*

I will stay at this hotel brand in my next trip. | **OVERALL SCORE: 5.40**

Most Recent Trip	<3 mos: 5.47	3–6 mos: 5.70	7–9 mos: 5.35	10–21 mos: 5.37		>12 mos: 4.96
Stayed at Hotel Before		Yes: 5.63	No: 4.85			
Loyalty Program Member		NA: 5.38	Yes: 5.79	No: 5.07		
Stays Per Year		<1: 4.94	1–2: 5.44	3–6: 5.63	7–12: 5.85	>12: 5.80
Length of Stay (Nights)		1: 4.89	2–3: 5.45	4–7: 5.53	8–14: 6.25	>14: 5.50
Hotel Class/Scale	Luxury: 6.13	Upper Up: 5.78	Upscale: 5.39	Upper Mid: 5.30	Midscale: 5.18	Economy: 4.57

I will continue to stay with this hotel brand if the price is increased slightly. | **OVERALL SCORE: 4.81**

Most Recent Trip	<3 mos: 4.76	3–6 mos: 5.05	7–9 mos: 4.93	10–21 mos: 4.74		>12 mos: 4.44
Stayed at Hotel Before		Yes: 5.06	No: 4.20			
Loyalty Program Member		NA: 4.72	Yes: 5.25	No: 4.46		
Stays Per Year		<1: 4.32	1–2: 4.86	3–6: 5.08	7–12: 5.17	>12: 5.16
Length of Stay (Nights)		1: 4.2	2–3: 4.87	4–7: 4.93	8–14: 6.10	>14: 4.75
Hotel Class/Scale	Luxury: 5.45	Upper Up: 5.24	Upscale: 4.78	Upper Mid: 4.72	Midscale: 4.62	Economy: 3.83

I will pay a higher price to stay with this hotel brand then staying at other hotel brands. | **OVERALL SCORE: 4.27**

Age		18–29: 4.52	30–39: 4.61	40–49: 4.31	50–59: 3.99	60+: 4.04
Most Recent Trip	<3 mos: 4.36	3–6 mos: 4.60	7–9 mos: 4.31	10–21 mos: 4.14		>12 mos: 3.75
Stayed at Hotel Before		Yes: 4.50	No: 3.70			
Loyalty Program Member		NA: 4.29	Yes: 4.67	No: 3.92		
Stays Per Year		<1: 3.68	1–2: 4.28	3–6: 4.65	7–12: 4.89	>12: 4.40
Length of Stay (Nights)		1: 3.57	2–3: 4.35	4–7: 4.42	8–14: 5.15	>14: 4.00
Hotel Class/Scale	Luxury: 5.30	Upper Up: 4.92	Upscale: 4.17	Upper Mid: 4.16	Midscale: 3.86	Economy: 2.97
Purpose of Travel	Exclusively Business: 4.87	Mostly Business: 4.58	Combined: 4.60	Mostly Leisure: 4.24	Exclusively Leisure: 4.14	

Scale: "1" Strongly Disagree to "7" Strongly Agree

gram (scores of 4.67 to 6.00). In recent hotel marketing research, brand loyalty has given way to "brand love" *(Wang, Qu and Yang, 2019)* which goes deeper than simply loyalty, and these two rebooking intentions are perfect indicators of brand love.

Likewise, the more the guests traveled (three to 12 times a year) and the longer their average stay (eight to 14 nights), the score were also much higher than those who traveled only a couple times a year or only stayed for a few nights per trip. Finally, guests in luxury hotels were the best word of mouth advertising a hotel can ask for as the score was at 6.25 for these guests to say positive things about this hotel brand, and at 6.20 where they would encourage friends and relatives to stay at this hotel brand. These guests also gave the highest rating that they would stay at the same hotel if prices increase slightly (5.45) as opposed to guests at the economy segment who only rated this intention at a low of 3.83.

OPPORTUNITIES ABOUND

Clearly, guest-facing technology are here to stay, and the usage is simply going to increase. With a generation growing up with a toy smart phone as babies to having real tablets and real smart phones, those who are 30 or younger are born with technology and have been using technology to learn and play. They are a rising segment of our clientele and will become more important as the age of the nation shifts.

For hotels, it is therefore not so much as to what we should do with technology as technology is part of the fabric. It is more of how we can leverage technology to help us increase revenue, manage costs and at the same time deliver top rate customer service to create a memorable experience for our guest to develop that "brand love" where they will always choose our hotel as their home away from home. Our hotel should be their business address, their vacation address and the place where they celebrate their birthdays, anniversaries, wedding showers, weddings, baby showers and every special event. Going back to target marketing, below are a few nuggets to consider.

Make Technology More Intuitive. If your hotel is developing its own technology, make it intuitive and have ALL guests in mind. If your hotel is buying a technology, look for the one that is the easiest to use. There is always a learning curve, and the shorter the better. For certain guests, a bit more instruction is appreciated and needed. If they don't even know how to use it, a hotel can "tell" their guests a thousand times to use it and still it will be sitting there idle. From a tent card to the front desk agent giving some simple instructions, to sending the guests a short video via email after they have made the reservation with your hotel, any tips on how to use the technology can make their experience more welcoming.

Upsell, and NOT Only Rooms. We have been working with our front office agents and even on our online booking site that as soon as a guest books a room, upgrade suggestions such as a better view, better floor, breakfast packages, cocktail packages, will pop up on the reservations. That is smart. But why stop? Anytime you send your guests a reminder of their upcoming reservations, leverage your technology to keep on upselling. If your hotel has the option of self-parking and valet parking, upsell your valet parking services. Celebrating a special event? Let us be your planner. Some hotels will ask on the reservation confirmation if the guests are celebrating a special event. Wouldn't it be nice for a couple who is celebrating an anniversary to walk up to their guestroom door decorated with a banner or balloons as a warm welcome? How about something special like a bottle of wine, champagne or non-alcoholic beverage awaiting on the coffee table? Technology can help you help your guests turn the unplans into plans. What a novel idea.

Upsell the Unplanned Once Guests are Onsite. Never waste an opportunity, right? If you make things easier, people will be more apt to try. Have items that you would like to sell in a QR Code catalog and put that code next to the lamp of the nightstand or by the television. Have something simple such as "Open your camera app and Scan Me – I offer discounts for many services and items for YOU!" Now you have your guests opening a whole menu from in-room dining, or menu from your restaurants. The app can also feature the technology in the room which you also can partner with your technology providers to sell to your guests. Negotiate with those suppliers and vendors for a percentage of the sale since you are doing the marketing for them and providing another channel of distribution for them. Some hotels have catalogs selling monogram bath robes, plush towels, or even glassware or coffee cups. Now, it is online — no printing needed, and adding new items or changing prices is just touching a few buttons *(Velten, 2019)*. What if you are a limited service hotel and do not offer food? Well, now you can partner with restaurants nearby, feature their menu items, and negotiate with them for a rebate back to your hotel for orders placed and delivered to your hotel guests.

Gender and Age: The Two Factors. When the unplanned purchases and rebooking intentions were analyzed against demographics and travel behavior (Tables 7, 8 and 9), we saw that the men gravitate more to technology purchases and the younger the guests, the more they are inclined to consider unplanned purchases. Income and education have no impact at all. Again, seize the moment. For the male guests and the younger crowd, market to them through emails or even social media before they arrive and continue to highlight those purchase opportunities upon arrival. Let them know the specials your hotel has to offer and how they can take advantage of that. Now, it does not mean you should tell your staff to ignore the other guests. We should treat all the same anyhow, but when possible, know your targets.

Your Returned and Loyalty Guests. From the set of eight travel behaviors, guests who stayed at the hotel before and also those who are members of the loyalty program all have higher scores in all unplanned purchases and rebooking intentions. The scores are also higher for those who stayed at the luxury category, followed by upper upscale hotels. Thus, for hotels in these two categories, the continuous building and enhancing of that loyalty relationship is paramount as these guests will rebook with you and will be your best advocates. With the wide use of social media, suggest to your guests certain spots at your hotel to take photos, especially if they are traveling with their families. They will be posting photos on their various social media accounts of them relaxing by your pool or the kids coming down the slides. Have a contest for people to post their photos from your hotel on social media — this is another way to market all the different facilities your hotel has to offer.

For hotels in the other classes and scales, your loyalty guests also indicated they will continue to rebook, but they are very price sensitive and only gave the economy segment a 3.83 where they would remain with your brand if the price was increased slightly and only a 2.97 where they would pay a higher price to stay with your hotel brand rather than at other brands (See Table 9). Thus, to ensure your loyalty guests will rebook, do be cognizant of the price point. And therefore, having simple technology to offer services with business partners in the vicinity may be helpful. In fact, during the pandemic, where restaurants can only open at 25 to 50 percent capacity, some restaurants have partnered with nearby limited service hotels without foodservice to use their conference rooms and patio space to provide meal delivery or set extra tables in the open area for the patrons and share the sales with the hotels. In Sweden, some hotels are using guestrooms and repurposing them as private dining rooms to observe social distancing — a new type of extended room service *(Springwise, 2020)*. There are always new ideas for new revenue streams.

Necessity is the mother of invention, and we humans are really good at it. Let's take the bull by the horn and use technology as our friend to weather through this time together and come out stronger on the other end.

REFERENCES:

- Saiidi, U. (October 3, 2019). Facial recognition is coming to hotels. I stayed at Alibaba's hotel of the future. Retrieved at https://www.cnbc.com/2019/10/04/alibaba-china-flyzoo-hotel-uses-facial-recognition-tech-and-robots.html#:~:text=I percent20recently percent20stayed percent20at percent20Alibaba's,deliver percent20items percent20to percent20guest percent20rooms.
- Springwise. (May 18, 2020). Hotel Turns Rooms Into Pop-up Restaurants. Retrieved at https://www.springwise.com/innovation/travel-tourism/stadt-hotel-popup-restaurants-coronavirus
- Velten, E. (March 20,2019). Love Your Hotel Room? Take a Piece of It Home. *NY Times*. Retrieved at https://www.nytimes.com/2019/03/20/travel/shop-hotel-rooms-boutiques-retail.html
- Wang, Y-C., Qu, H., & Yang, J. (2019). The Formation of Sub-brand Love and Corporate Brand Love In Hotel Brand Portfolios. *International Journal of Hospitality Management*, 77, 375–384.
- YellRobot. (April 4, 2019). Alibaba FlyZoo Hotel Uses Facial Recognition and Robots. Retrieved at https://yellrobot.com/alibaba-flyzoo-hotel-hangzhou-china-robots/