

Technology Responds to Covid

1 Introduction

Think about how things once were in the hospitality industry. We used to always refer to it as a “high touch” industry. We had lots of personal contact with our guests, whether at the front desk or in the restaurant as two examples. Covid has affected that notion to different degrees in different places. Many of the offerings from the past have been discontinued or radically changed. Anything that gets touched by more than one person is being reevaluated, such as a buffet serving spoon, or in-room amenities. Whether you are a manager or team member, “disinfecting” is now part of your vocabulary and daily routine. It is also part of the sales and marketing initiatives where guests are targeted with “clean” campaigns. Take a look at the major hotel brands and how many of them have new slogans and/or partnerships with cleaning products or services companies. There is more to come on this in our first interview. As a general rule for a hotel, a healthy occupancy percentage with a standard room rate was around 65-70%. According to Smith Travel Research, occupancy percentage reached the low 20’s percentage in 2020 in the United States. It recovered to 60’s in 2022, and 2023 but is vulnerable to new virus variants, and in places where vaccine rates are lower than others. In person meetings are only now starting to return to some sort of new normal, but most of the hotel occupancy increases are leisure travelers. Business travel and industry segments dependent on it took a heavy hit. You may be more connected to business travel than you realize. Your airplane ticket is one example. It is getting more expensive for many reasons, but fewer routes, staff shortages, and more expensive fuel is only part of the picture. Those first and business class tickets were big money makers. Not anymore. So the cost gets increased in the other sections of the plane.

The in person restaurant experience is particularly hard hit. Adding to the difficulties, at least in the United States, the “Great Resignation” occurred where many pandemic scars were revealed and millions did not return to their jobs after the lockdowns ended. What is known as the “Travel and Leisure” segment to economists was particularly hard hit. Many blame the lower wages, less predictable schedules, and a higher virus contraction potential. Much will be written about this as well in the future. The goal of this chapter is to look at how some of the technology and the business functions it supports have changed in the “hopefully” later stages of Covid.

Much of what drove our industry still remains. The general state of the economy and level of disposable income have always been important and obviously remain so today. Add in gas prices, terrorism, travel and food shows on TV, online influencers, cyber security and the important factors get more complete. Arguably, before the pandemic, the bigger industry news stories were with the sharing economy such as Airbnb and food delivery apps taking customers, and of course all things smart phone and mobility. The last section of our hotel and resort technology chapter (5) on external influences is worth revisiting.

Old problems regarding technology in our industry have not gone away. **System Integration**, or getting all the technology from different vendors to work together is still a challenge. Technology purchases must still meet specific break-even points and be secure. And most importantly, the on-line reviewing customer is still King. In the next section, we did things a little differently for this new chapter. Since what is going on is so current, we interviewed three people from our industry to get some feedback from unique angles. The first two were given the same ten questions and the third provided summary feedback from a consultant's perspective.

2 Interview 1

Jessica Testa is one of our award winning authors and has done everything from General Management on multiple continents to new brand development. This time around she serves as one of our interviewees.

1. What are some of the biggest customer demands in this Covid environment?
 - a. Cleanliness
 - b. Booking flexibility
 - c. **COVID protocols**, i.e. masked staff
 - d. Particularly in younger generations, self-service technology tools that can minimize shared touchpoints
2. What are some of the major new safety protocols you are seeing?
 - a. Every major hotel chain implemented some type of cleanliness-focused program. Hilton, for example, launched Cleanstay in Spring 2020 whose major components consisted of a partnership with Lysol for disinfecting materials and Mayo Clinic for their expertise in cleaning protocols. Operational protocols included a mandated amount of disinfecting stations at elevator banks and entrances, special disinfecting of the defined "top 10 hotspots" in guestrooms using Lysol, an opt-in service model for housekeeping (guestrooms only cleaned upon request vs. the pre-COVID norm of housekeeping cleaning all stayovers unless the guest declined it), and a Cleanstay seal on all guestroom doors upon arrival. The Cleanstay seal signaled to the arriving guest that their room had been thoroughly cleaned and disinfected and that no one else had been in the room since then. Shortly after launching Cleanstay, Hilton also launched EventReady, which focused on safety protocols for meetings & events and elevated hybrid-meeting and technology solutions.
 - b. Additional safety protocols that seemingly were consistently implemented across hotels included mask mandates for staff and guests in public areas, temperature checks, limiting elevator occupancy, social distancing of lobby and restaurant furniture, restricting fitness room or equipment usage (i.e., reduced capacity, appointments-required, or blocking off every other piece of equipment), the installation of plexiglass at the Front Desk and retail outlets, eliminating buffets, individually wrapping grab & go fruit, and using single-use, disposable materials for F&B.
3. What new needs do team members have?

- a. There is an enhanced focus on compensation, benefits, work/life balance, flexibility, and workplace culture established by upper level management. Additionally, many career line-level workers were laid off during the pandemic and took interest during that time in something different. Now, many of these same people are no longer interested in coming back to the industry. Hotel leaders have an even larger responsibility to foster a safe, positive, and inviting work environment with ever-rising market competitive fair wages & benefits.
4. What are some technology examples that are playing a role in this “new normal?”
 - a. **QR (Quick Response) codes**- in an effort to minimize communal touchpoints like menus, most collateral items that were traditionally printed have transferred to QR codes. For example, in-room directories, room service menus, and restaurant menus.
 - b. In-room fitness options- having fitness equipment available in-room or streamable on the TV. For example, CitizenM launched a partnership with GymBox at the beginning of 2021, which delivers 45-minute-long workouts ranging from kickboxing to yoga, right from the comfort & safety of your own guestroom.
 - c. **Digital key** and room control options- companies like Hilton already offered Digital Key (where you can check into your room and unlock doors from their app) and Connected Room (where certain room controls like HVAC can be controlled from your phone) for Hilton Honors members prior to COVID. However, in this “new normal,” I’ve seen similar technology more prevalent in other brands as well as extended to guests who did not book directly with the hotel.
 - d. Streaming- Companies like Hyatt integrated their TVs with Google Chromecast to enable guests to stream and manage the TV from their own devices
 - e. Texting with guests- While not really a new technology in hotels, usage of this has increased as more guests are leveraging digital check-in options and/or want to reduce interaction and exposure to others
 - f. Cleaning technology- a number of new cleaning devices made headlines since the onset of the pandemic, like antimicrobial applicators of nanotechnology. A common usage of this is on high-touch items like elevator buttons, as these antimicrobial covers essentially inhibit the growth of disease-spreading microorganisms.
 - g. Check-in kiosks and in-room tablets- seen at brands like Moxy, CitizenM, and Yotel, self-service tools like check-in kiosks and/or in-room tablets enable guests to manage the majority of their stay experience from their fingertips. These can be lifesavers with the staffing crises!
5. Aside from the buffet, what other offerings have or will be discontinued or scaled back?
 - a. Stayover cleaning- at nearly two or more years since COVID was officially declared a pandemic, it seems that hotels have not clearly defined their positioning still on stayover cleaning. While at first the removal of stayover cleaning was a safety precaution- I don’t think anyone wanted a stranger in their room back in Spring 2020!- the unavailability of stayover cleaning at many hotels

throughout 2021 seems more closely related to staffing issues, under the collective guise of “due to COVID.” Prior to the pandemic, many hotel chains offered incentives to guests who declined their daily housekeeping service. As of now, it does not seem that these incentives to decline housekeeping are coming back, but many also seem to have the perspective of, “*do we really need to go back to daily cleaning?*” It may be a matter of guests just getting used to not having it anymore at economy and midscale brands unless requested, for example, with varying degrees of frequency amongst the higher-tiered sectors. Stayover cleaning practices will also vary significantly by country and region.

- b. Paper materials- I think hotels have been trying to phase out of paper newspapers, menus, and directories for a couple of years now. COVID forced them to be removed altogether in the height of the pandemic, and with available digital solutions like QR codes, there isn’t really a need to bring these back.
 - c. Inflexible booking terms- Although some heavily discounted non-refundable rates are resurfacing, flexible accommodations and group booking policies are of critical importance as consumers return to travel.
6. Is departmental consolidation and less managers a trend or here to stay?
- a. From my viewpoint at corporate, I do not see reduced managerial staffing at any of the hotels with whom I most closely work, but line-level staffing continues to be a challenge. To me it does not appear that any department that’s still consolidated actually wants to operate that way, they just don’t have any other choice as they can’t fill open positions.
7. What are some challenges that may not make the headlines, that our industry is facing?
- a. Everyone knows about the staffing crisis, but most consumers don’t seem to understand how burnt out the people who actually *are* showing up for work on a daily basis are. The hotel industry has historically been known for long, unpredictable hours, but with today’s skeletal crews the workload is *that* much more compounded. Inversely, rates are already surpassing 2019 levels in some markets, so now guests are paying more but feel like they’re getting less due to no stayover cleaning, reduced F&B offerings, and constantly being asked to have patience due to low staffing. It is a very challenging time in hotel operations!
 - b. It’s a bad time to be an independent hotel developer if you require financing through banks which are increasingly more hesitant to provide these loans without a recognized brand affiliation. The industry will see a tremendous amount of growth in conversion-friendly, where it can easily change its ownership structure, and soft-brands, where small hotels can join with a larger chain but still retain their unique offering, in the coming years.
 - c. Construction costs have increased significantly. Anyone who is remodeling their home may have noticed the difficulty in finding available contractors and the ever-increasing price of lumber. This is absolutely impacting construction timelines and costs, as owners not only have to invest more money in the construction materials but also lose money by having to delay their opening dates.

- d. Supply chain/logistics delays. Most hotels' operating supplies, furnishings, fixtures, and equipment are imported. The intermittent lockdowns in other countries compounded with unloading delays at ports and a lack of delivery drivers on the ground are causing operational shortages on-property and delaying opening timelines for hotels under construction. Let's say for example a guest requests an extra bottle or two of lotion- something that pre-pandemic, would have been a very simple request. Nowadays, per the aforementioned staffing shortages, there may not be someone available to deliver this lotion. Even if there is someone available to deliver it, the reason why the room was prepared without the lotion bottle in the first place is because the lotion is on a three-month backorder. This seemingly simple guest request can now be a very complex issue at some hotels. On a positive note, I think the focus on shopping/sourcing locally has increased as well as the focus on supporting BIPOC (Black, Indigenous, People of Color) businesses. Although logistically smaller businesses may not be able to compete with the prices of the larger suppliers like Guest Supply and/or meet the distribution requirements for nationwide implementation, shopping locally, responsibly, and sustainably whenever possible connects hotels more deeply with their local communities and sends a positive message to the ever-increasing amount of consumers who take companies' values and business practices into account when considering where they will stay.
8. What technology changes surprised you the most during these past couple years?
 - a. Hilton's Confirmed Connecting Rooms. Guests can now reserve confirmed connecting rooms during the booking process, which is a fantastic plus for traveling families and friends. When I used to work Front Desk ten years ago, we never guaranteed connecting rooms unless the guests had booked a certain type of suite or spoken with a senior level manager significantly prior to their trip!
 - b. How so many traditionally "standard" in-room amenities and practices are becoming obsolete such as wake-up calls. Who even does those anymore? Or, why would anyone make a \$10/minute phone call from the hotel room phone when you can use social media, WhatsApp, or any other number of features on your own phone to call for free? Many ask why hotels even have phones anymore (the answer is for Fire, Life, & Safety reasons by the way). Does anyone use the alarm clock for anything other than a USB outlet for their phone? When traveling abroad, there is almost no need for adapters anymore if the only thing you're charging is your phone, so long as the hotel has been updated recently to include USB port outlets. Next, most younger travelers (under 40) would rather use a steamer than a traditional iron and ironing board. Finally, more and more guests are expecting products like white noise machines, Smart TVs, premium quality coffeemakers, and sleep and wellness products in their rooms.
 9. How has the competitive landscape changed?
 - a. Travelers are willing to pay more for unique, local, and Instagramable experiences. This has led to significant development in the Lifestyle space by a

number of major hotel chains. In 2021, Accor and Ennismore joined forces with the mission of being the largest and fastest-growing Lifestyle hospitality company. They are now the world's largest operator of Lifestyle hotels with a 12-brand portfolio including 25hours, Hyde, Mondrian, SLS, and JO&JOE.

- b. With many offices still closed, operating under a hybrid environment, and thriving in the “new normal” virtual workplace, corporate travel is still lacking. However, an interesting juxtaposition to this is the number of people seizing the opportunity to travel and work from home anywhere they’d like. Brands like Selina capitalize on this, offering programs like CoLive where travelers pay a flat monthly membership fee that gives them 30 days of accommodations at up to ten Selina hotels per month, along with access to Selina’s co-working spaces at each property and discounts in F&B.
10. What do you see happening in the next few years with technology in hospitality?
- a. Worldwide 5G network growth delivering even faster, more stable connectivity 24/7.
 - b. Global environmental concerns may eventually impact hotel building requirements and standards.
 - c. Continued focus on self-service tools that guests can use on their own devices to communicate with hotel staff, manage their stays, and operate various controls in their rooms.
 - d. Fortification of cybersecurity practices. With one of the largest global hotel chains having been impacted multiple times with substantial data breaches in the past few years, protection of data is of the utmost importance.
 - e. **Hybrid meeting** technology expansion. The world demonstrated its ability to work virtually these past few years. Continued border restrictions coupled with increased expectations of flexibility by corporate employees from their employers is a challenge. It’s fair to expect that seamlessly-integrated hybrid meeting technology will be a key selling point for a number of events, especially corporate events, in the years to come.

Interview 2

With that in mind, let’s turn our focus to those events. Kara Krall is corporate meeting planner who shifted roles, or had her role shifted upon her, from the in-person experience to on-line meeting and convention event planning.

- 1. What are some of the biggest customer demands you saw during Covid?
 - o The quick ability to change from in-person to virtual or vice versa for both the speaker & attendees.
 - o Speakers needed planned virtual rehearsal time, familiarity with the new on-line platform, proper camera & lighting, slide advancement, and videos.
 - o Attendees required sleeping room cancellation ease, to not be included in food counts, airline ticket cancellation, on-site gift needs mailed, breakout groupings reshuffled to meet virtual or in person needs.

2. What are some of the major new safety protocols you saw or are seeing?
 - In-person meetings: ability to see attendee comfort level regarding social distancing by using different colored masks, bracelets, lanyards, etc.
 - Availability of daily on-site testing sponsored by the host
 - Hotels may not have masking/distancing signage as restrictions ease. If your meeting has requirements print your own signs and instructions

3. What new needs do team members have?
 - Trust from their managers that the work is getting done without constant communication and interruption.
 - Data collection: clocking in and out virtually, productivity.
 - Monitoring Covid protocols: In the City where the event is being held, company policies regarding vaccinations and venue policies need to be updated constantly.

4. Aside from the buffet, what other offerings have or will be discontinued or scaled back?
 - Team building and networking events.
 - On-site registration (contactless check-in and pre-registration required).
 - Group ground transportation.
 - Ground costs was proportional to the type of distancing required onboard:
75% capacity = additional 25% cost
50% capacity = additional 50% cost
25% capacity = additional 75% cost

5. Is departmental consolidation and less managers a trend or here to stay?
 - Here to stay. With a shift in how management roles are defined. Remote managers are viewed more as project managers and leaders as opposed to a traditional boss.

6. What are some challenges that may not make the headlines that our industry is facing?
 - Attrition and not meeting F&B minimums for hybrid meetings
 - The need for outdoor meeting space
 - Less lead time given for virtual events because contracting space isn't needed
 - Qualified staff for large virtual events; more technical skills are needed
 - Flexible refund policies
 - Back up staffing
 - Sponsors and exhibitors not achieving the attendee engagement they would normally experience
 - Hotel RFP's are taking longer to review/process due to short staffing

- No third shift for overnight changes
7. What technology changes surprised you the most during these past couple years?
- The need for venues to provide more information for online sourcing, realistic room diagrams showing room configurations, and up to date menu pricing.
 - The amount of **virtual platforms** and integration current knowledge needed.
 - The cost of on-site AV equipment needed to integrate a hybrid meeting.
 - The push for internal meeting participants to be on camera.
8. How has the competitive landscape changed?
- Although mobile apps were widely available pre-pandemic, cloud based event management software was forced to find more ways to integrate with current platforms.
9. What do you see happening in the next few years with technology in hospitality?
- Virtual has worked for educational purposes, drawing in those who could not normally attend in-person and increasing profit and knowledge sharing. Although much of what happens at meetings and tradeshow can happen virtually, the chance of impromptu conversation isn't an option. Technology is improving to meet the need for human interaction. Companies must understand adopting this new tech is necessary to provide a better attendee experience.

Interview 3

Jenn returns to this new chapter after being interviewed in chapter 2. Again, she is a well-known hospitality technology expert and consultant and presents the changes we have seen in consulting form.

Highlights:

1. New technologies introduced because of COVID
2. Changes in the guest journey/experience due to COVID
3. How staff operations have been affected by COVID

Covid still plays a part in day-to-day hospitality operations and how we conduct business. However, it depends on where you are in the world as to how extreme it is still affecting the industry. Some places in the US who were hit harder by Covid had policies in place like mask mandates in public areas longer than others, although these were mostly implemented by local and state government restrictions. That meant travelers needed to be aware of the changing landscape from state-to-state and even country-to-country.

When we think about the overall guest journey, it begins with the booking processes. Properties had to make sure they updated all marketing materials, websites and guest

communication, like confirmation letters, to explain how we were applying safe cleaning procedures, social distancing, contactless staff interaction, etc. In addition, hotels had to be transparent about changes at the properties so guest expectations were in alignment when they arrived, such as restaurant closures, limited housekeeping service and other affected amenities. Finally, the industry had to pivot away from the common cancellation policies that were normally in place and adopt a more flexible approach so guests would feel more comfortable to change their minds about traveling and wouldn't be penalized when needing to cancel their itinerary. Needless to say, all of these phases of the booking process involve updates and revisions to our booking technologies and how they integrate to our Property Management System (PMS) as well as others like our Customer Relationship Management system (CRM).

The arrival experience for a guest has also seen some changes due to Covid. Most hotels implemented a pre-arrival check-in experience that allowed guests to pre-register for their upcoming stay. This would include gathering arrival time, payment information and any last minute requests. This experience is handled via an automated email to the guest that includes a link to a web-based application that is either embedded within the hotel's PMS or a third-party application that integrates with the property's PMS. Some PMS systems will also automatically check-in the pre-registered guest to their assigned room once it's ready and marked inspected by Housekeeping. These technologies and automation help support a contactless experience as well as decreasing guest activity at the front desk which is helpful where operational labor has been limited. Another technology hotels chose to deploy to allow guests to completely by-pass the front desk on arrival is to offer a mobile key. If a hotel has BLE-enabled locks (Bluetooth Low Energy) they could offer this option for guests to download the mobile key application prior to arrival. Guests would then be notified on their phone when the key is ready and what room they were assigned. At that time, a guest now has access to open the mobile key in front of the key lock to open their guestroom door.

Other alternatives that we've seen during the Covid-era hotel experience is the deployment of self-service check-in kiosks. These are typically installed in a hotel lobby and allow a guest to provide certain criteria to find their reservation, supply payment via a credit card device, sometimes pass biometric verification with ID scanning and electronic signature for the registration card. This process integrates with the hotel PMS and providing all steps are successful for the guest to be checked-in, a key encoder will be present for the guest to encode their key or one will be dispensed for them.

While on property, Covid procedures affect several departments such as Food and Beverage, Housekeeping and the Front Office and how they provide service to the guest as well as operating internally amongst staff.

Almost all hotels experienced some sort of reduction in their Food and Beverage operations. Either restaurants were closed completely, or they were on reduced hours. One of the ways we still manage to be successful and provide our guests service is to offer more takeout or grab-n-go options. QR codes became prominent in guestrooms to allow a contactless ordering experience since many hotels removed room service menus and other printed materials such as in-room compendiums. Although room service wasn't the same experience, as staff would not

enter rooms to present the meal, this delivery service was implemented in its place. In addition, many hotels took advantage of Over-the-Top (OTT) in-room experience systems which are accessible to guests on their in-room televisions. Hotel information was shared on the TV screen as well as some enhanced options where guests could browse menus and order food right from the TV.

Guests experienced a rise in SMS Messaging with hotels during Covid, as that was a means to seamlessly interact with staff in a contactless fashion. One example would be for a text to be pushed to a guest an hour after check-in. This text would greet them and advise that they can message back anytime during their stay with requests or questions they may have. In addition, this communication method allowed guests who wanted to schedule housekeeping service during their stay to do so easily via their mobile device.

Some hotels had to limit amenities to guests or had to reserve time for guests. Fitness rooms and yoga classes could no longer operate at full capacity and guests had to book time slots to workout. Areas such as fire pits or grilling stations that were once on a first-come, first-served basis had to be reserved with the front desk or concierge. While some hotels could manage this using a shared spreadsheet or document, several time-based activity tools were implemented to allow the staff to secure guest attendance and not run the risk of overbooking.

With the additional cleaning guidelines Housekeeping must adhere to intertwined with abandoning cleaning services to stayover guests, checked-out rooms will take longer to clean. This creates a problem with hotels that have small windows between check out and check in times. Implementing technology at the housekeeper's fingertips has improved the ability for housekeepers to know what rooms to clean, know when guests have checked out and allowed room statuses to be updated quickly. Many PMS's or third-party applications allow housekeeping assignments to be viewed on a tablet or phone. Attendants will receive real-time updates on the occupancy of the rooms they have been assigned, which can help navigate them to the rooms that have been vacated first. Once rooms are completed, staff can quickly change the room status to clean or inspected by utilizing their phone or tablet in which the update the rooms to be ready to be assigned in the PMS for incoming arrivals.

So once again, more technology that has been implemented, with rising costs to follow Covid-friendly procedures, is now mixed with lower occupancies. This has definitely created a conundrum for our industry regarding how to stay profitable and sensitive to the changing landscape with Covid!

3 Artificial Intelligence

Before we talk about some of the highlights from the interviews, we will touch on another important evolving technology, Artificial Intelligence, or AI. According to www.britannica.com **Artificial intelligence** (AI) is the ability of a computer or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and discernment. Nov 9, 2021.

More simply, think of computers doing what was traditionally done by people. One example would be when you talk to a computer when you call a company over the telephone and are asked questions. Others include self-driving personal vehicles or smart voice assistants, whether on your phone or in separate stand-alone devices such as Amazon Alexa. Industries that are being greatly impacted by AI currently include transportation, manufacturing (robotics) and healthcare. Our “high touch” industry has been further changed by AI in reaction to Covid. If human contact can be reduced for virus concerns, and as we saw in the interviews, technology could be a solution. In addition to the chat bots found in reservation systems, whether online or through a call center, we see AI in our industry in other places as well. New Generative AI from Chat GPT and big technology companies are now even enabling AI to create content in different ways in a few seconds. Robotics, widely used in manufacturing, is seeing more uses in hotels. Automation has evolved into what is known as machine learning where a robot AI enabled concierge from Hilton and IBM learns the guest’s voice and patterns and over time delivers more tailored services. Additionally, AI also aids in many back office and corporate functions in detecting patterns to aid in decisions such as room rates and labor scheduling.

AI is not without controversy. Technology has a history of replacing what were before human tasks, such as in manufacturing. In the past, it has mostly freed up humans from doing repetitive work, so they could concentrate on more value added endeavors to the organization’s benefit. Many smart people say we should tread lightly and that this time is different. Think of a future where trucks deliver goods themselves and robots provide more services in the hospitality industry, as just two examples and clearly fewer jobs will be available for humans. As a further evolution of AI, we now have Generative AI, where technology creates something, say a picture or an essay, on a topic when prompted. While in its early stages, many see it as a truly disruptive technology to the knowledge and creative class. To the furthest extreme, will AI make decisions during a war or decide that we are no longer needed? It is the stuff of movies. As stated before, many leaders from inside and outside of technology are urging caution.

4 Summary

The interviews bring out some commonalities that may mesh with the technology you are encountering these days as well. The old quick response (QR) code created in 1994 saw a huge resurgence in different ways from vaccine certification and travel applications to opening online restaurant menus. Clearly, anytime the consumer is in charge of what they touch is a benefit these days. Just as in AI, many are recommending caution in this space as well. The convenience may come with yet another surrender of privacy, as our movements are tracked. We also heard how much of what these bar codes replaced and other past items such as in-room amenities, among others, are being discontinued. What is offered is being delivered in a more sanitized fashion such as individually wrapped food items and deeper room cleanings before and after a stay, with much in-house, or stayover cleaning being discontinued to again minimize human contact. As before, there are unintended consequences here as well. Much is reported on the increase of waste due to all the new safety procedures. Imagine just how many

masks and gloves have been discarded around the world. And that is just a small piece. Before, our industry was making great strides in sustainability. Certainly, and necessary for now, that notion is being challenged. Another old technology that has seen increased usage is the old SMS (Short Message Service) or texting, to minimize in person contact as well. Add keyless entry, which has also been around, and we see how old technology can sometimes be repurposed. Perhaps the best example of an old technology repurposed for our covid restricted lives are virtual platforms, which we used to call videoconferencing. Companies such as Zoom, Google, and Microsoft among others allow people to “work from home.” The hospitality industry has adopted these new platforms and added to them for hybrid meetings or advanced streaming guest needs. Traditionally, a guest in a full service hotel guest expects what they pay for to be as good, if not better, than what they have at home or work. Technology is no exception. In the new streaming era, many hotels and other hospitality organizations have not only offered state of the art streaming capabilities, but newer meeting locations and business centers for their customers. From a company perspective, we now have increased cloud usage where many applications, data, and services are stored and processed on third party vendor’s servers such as Amazon Web Services, Google Cloud, or Microsoft Azure. Hospitality organizations have also changed the way many of their current systems work to accommodate new reservation and operational types (e.g. connecting rooms, selected fitness center times, no stayover cleaning). From a business standpoint, many traditional lodging businesses are hoping that their experience and these newly tailored service offerings can help them compete (and sometimes partner) with the sharing economy from such companies as Airbnb or Grubhub. Technology continues to adapt to our ever changing industry.

5 Case Study and Learning Activity

For this section, let's revisit our case study from chapter 5 and adapt the learning activity for our current Covid setting.

Case Study

A Day in the Life- Ana, New York City Hotel Manager

See How the Technology All Comes Together

Ana is the General Manager at a large New York City hotel, boasting over 1000 guest rooms and 60,000 square feet of meeting space. It was closed for 7 months during the height of the pandemic and is about to reopen. No two days were the same for her, granted the large array of events, delegations, tourists, and corporate guests transiting through her hotel on a daily basis. To stay on top of it all, Ana and her team relied heavily on the variety of technology in place on property.

Front Desk- Her Front Desk team sees hundreds of arrivals and departures each day. The PMS used by her hotel allows them to see the arrival lists, identify their source (Travel Agent, OTA, Company, Loyalty Program, to name a few), and assign the rooms. Preferences of members of the loyalty program, along with any notes added on other guests' reservations, are used to pre-assign the best room for each arrival. For example, high floor, non-smoking, or away from the elevator. Guests who use the digital check-in on the hotel's mobile application, which is integrated with the PMS and the e-checking dashboard system used by the property, will choose their own rooms and receive a notification on their smartphone when their room becomes available. Guests checking in at the hotel provide their phone number and receive a text message when their room becomes available. The PMS is integrated with the Housekeeping Department, so the Front Desk monitors the status of the rooms as they become available and inspected directly through the PMS. Every morning, the Front Desk runs a CRM Report to track the information about their loyalty program arrivals using the hotel chain's CRM database. From the PMS, they also run a Service Recovery Report to track all complaints made the day before so as to provide managerial follow-up and ensure guest satisfaction. The PMS also provides reports like the Credit Report and Trace Report. The former tracks all rooms without sufficient credit card guarantee on file, while the latter tracks important reminders set by the Front Office team like "Mr. Rivera's birthday in room 603 on July 10th." Additionally, the Front Desk team relies on a Key Card system, which enables them to code guests' key cards unique to their room number and check out date. The PMS also has an integration with the credit card companies, like American Express and Visa, to preauthorize and charge guest credit cards.

PBX- In Ana's hotel, the operator or PBX team tracks all guest calls in a system called HotSos. Room 705 needs more towels? A request is logged in HotSos and assigned to a Housekeeping runner. Room 1012's bedroom ceiling light bulb burned out? A request is logged in HotSos and assigned to Maintenance. To guarantee that guest calls are resolved in an efficient manner, the PBX team tracks the request times on each ticket and ensures none surpass 30 minutes. Nowadays, many of Ana's guests prefer to send their requests electronically as opposed to calling the hotel operator, so Ana also invested in tablets for each guestroom. The information on the tablets is translated into five different languages, and guests can use the tablet to verify restaurant hours, order room service, and request amenity delivery to their rooms. Guests can also configure wake-up calls and seek information about activities and restaurants in New York right from the tablet.

Housekeeping- When Ana heads over to visit the Housekeeping Department, they are running their housekeeper room assignments for the day. The PMS has a report capability that automatically assigns the housekeepers rooms based on the amount of credits. For example, each housekeeper may be assigned 10 credits daily. A standard room may be worth 1 credit, whereas a two-bedroom suite may be worth 2.5. As the housekeepers complete each room assignment, they dial an extension configured into the guestroom phone indicating that the room is ready to be inspected. The Housekeeping team also utilizes HotSos to log any deep cleaning needs observed in guestrooms, common areas, and meeting space like curtain washes or carpet treatments to track and provide proper follow-up.

Maintenance- Maintenance uses the PMS to block off rooms for their quarterly preventative maintenance schedule. They also stay on top of requests logged in HotSos in guestrooms, common areas, and meeting space in an effort to keep the hotel in top shape.

Revenue Management- Ana's Revenue team relies on several systems and external reporting agencies to optimize their management of the hotel's rates and inventory. Ana's budget allows for them to subscribe the STR Report, an external research company which provides a weekly analysis of her hotel's "piece of the pie" versus her competitive set. Her hotel also utilizes a forecasting system, which takes into account special events, forecasted productivity per market segment, and estimated wash to properly price and sell her available inventory. Her team also uses a centralized revenue management database to lay the foundation of her hotel's rates and rate codes. This database is connected to external agencies like OTAs as well as to the hotel's PMS to provide real time rates and inventory availability.

Sales- Ana's sales team utilizes a system separate from the PMS, called Delphi, which enables them to elaborate BEOs (Banquet Event Orders). These BEOs specify the catering booked, audio/visual setup of the meetings, and the meeting room setup. The Banquets, Stewarding, and A/V Teams then take this information to order all products necessary for the event and set up properly on the actual day of the event. The Sales team also runs reports from external systems like Cognos so as to obtain market intelligence data, as well as different lead response programs to manage Requests for Proposals from global companies and event planners. The Sales team utilizes the PMS to generate their groups' house accounts, as well as the same inventory management system used by Revenue to create the room blocks.

Food & Beverage- Along with relying on Sales' BEOs, the Food & Beverage team also utilizes several different systems. For most Purchasing needs, they use a purchasing system that holds all suppliers' electronic ordering forms, thus simplifying the ordering process drastically. In the hotel's restaurants, the Food & Beverage team also uses the Micros/Oracle POS (Point of Sale) system to log all customer orders and send them to the kitchen. The POS is integrated with the PMS, thus allowing the Front Desk to receive updated room charges on the guests' accounts.

Administrative Teams- The financial teams of the hotel utilize separate financial and accounting systems to process Accounts Receivable and Accounts Payable. Employee time cards are processed through a system call PeopleSoft, and paychecks are delivered through an external company, ADP, system.

As you can see, this is just a mere glimpse of the array of technology integrated into a hotel's day to day operation. Ana's hotel is a prime example, given the size of her hotel and complexity of her operation. Now the focus is on adapting to Covid.

Learning Activity

1. What new technology will the hotel need in this Covid environment?
2. What new employee procedures will need to be put in place?
3. Should any past procedures be altered or discontinued?
4. How will you market the hotel?

Key Terms

System Integration

COVID protocols

QR (Quick Response) codes

Digital key

Hybrid meeting

Virtual platforms

Artificial Intelligence (AI)