

Work Shift – Episode 10
Disruptive Technologies in the Hospitality Industry

[music]

CHILD 1: When I grow up, I want to be a contractor because I like building stuff.

CHILD 2: When I go grow up, I want to be a stunt double.

CHILD 3: When I grow up, I want to be an astronaut and travel to Mars.

SHAWNE McKEOWN: It seems hard to remember a time when we didn't use apps and online services to book vacations, order a coffee and help us decide how to dine. Pros in the hospitality industry always have their eyes out for hot trends and new technologies to improve service. And over the last decade or so, this industry has experienced huge change. Short-term vacation rental or home sharing sites continue to disrupt the hotel industry. Online travel agencies have been around since the '90s and we continue to see their impact. In September 2019, the long standing U.K.-based tour company Thomas Cook collapsed. Industry analysts say that the company's slow reaction to online rivals was part of the reason for its demise. And let's not forget social media and automation and robots have been introduced at restaurants and hotels around the world. New technologies can provide innovative services and customer experiences. They can also create new jobs and transform existing roles in the industry. Here's a quote attributed to Apple founder Steve Jobs that relates well to what we're talking about today: *"Get closer than ever to your customers. So close that you tell them what they need before they realize it themselves."*

[music]

SHAWNE McKEOWN: Welcome to Work Shift.

DONNALU MACDONALD: It depends on the kind of traveller as to how maybe interested they'll be dealing with a robot or dealing with a person. So if I'm a road warrior and I'm on the road all the time, I could care less if I talked to someone. Facial recognition sees me coming in, sends something to my phone that tells me, 'you're going to room 222 today' and I can check into the room with my phone, I can pay.

[music]

RAY HARRIPAUL: Digital disruption.

SHAWNE McKEOWN: The gig economy.

RAY HARRIPAUL: Artificial intelligence.

[synthesized voice] Robots.

RAY HARRIPAUL: There's a lot of talk about these things in the media and online but what do they mean for you?

SHAWNE McKEOWN: I'm Shawne McKeown.

RAY HARRIPAUL: And I'm Ray Harripaul.

SHAWNE McKEOWN: We are exploring the future of work and changes you can expect to see at your job.

RAY HARRIPAUL: We'll tell you how this massive digital shift could change your career and what you can do to adapt, evolve and thrive.

SHAWNE McKEOWN: I know you just heard him there but my co-host Ray is away with this episode but don't worry, he'll be back on the next show. Today we're talking about disruptive technologies in the hospitality industry and how they've transformed jobs and will continue to do so. We're kicking things off with Donnal Macdonald. She worked in the hotel industry for nearly 15 years before moving into teaching. She's a professor at George Brown College's School of Hospitality and Tourism Management. And right now her focus is on sustainable facilities management and service excellence. The hospitality industry has experienced a lot of change. Let's travel back with Donnal to the days of metal hotel room keys and comment cards.

DONNALU MACDONALD: So when I think about when I first started working, I worked as a front desk agent. So we dealt in cash and we took credit cards and we had metal keys. One of my very first jobs was a mail and information clerk and I had to, you know, answer questions, provide information to the customer but I sorted out metal keys for rooms because if you didn't sort out the keys, the guest might not be able to check in. And today, you know, in one of my classes, a student was telling me-- he's from Taiwan-- and he was telling me about a hotel where, you know, they actively use facial recognition so that when a guest walks through the door, they already know, 'oh, that's Donnal McDonald that's just walked through the door and we've got her room assigned or, you know, we've prepped-- we've done whatever needs doing so that she can now check into her room. So when I think about the change in my lifetime, you know, that's happened mostly with-- probably within the last 10 to 15 years, I think about people who used to work in reservations. They're not order takers anymore if they're still existing as reservations agents doing some of the same basic duties. They now have become more reputation managers. So a lot of times, the people that used to work in reservations have ended up being the people who are responding to comments on social media, looking at complaints or, you know, constructive criticism that might come through some of the booking sites like Expedia or Booking.com.

SHAWNE McKEOWN: So they're kind of problem solvers?

DONNALU MACDONALD: Yeah. So there's a whole different level of skill. It used to be more about learning how to use the computer to book a reservation and make sure you asked all the right questions. Now it's about reacting to whatever the guest is bringing to you as an issue. So there's definitely more emphasis for the people that are there still to be-- that it's the people skills that are increasingly important.

SHAWNE McKEOWN: One thing you mentioned there is responding to customer complaints. Can you tell me a bit about how that's changed not just for the people who are working in the reservation departments but in general? And how the expectations have changed on the customer side?

DONNALU MACDONALD: So when I first started working in the industry, it was quite common to have a guest comment card in the guestroom. And the guest would fill it out and they'd drop it off at the front desk on their way when they checked out at some point or the room attendant might find it in the room when the guest left. That comment card would go to the front desk, it would get sorted out. We'd maybe address, you know, where's the major issue? Is it a good thing that needs to go to the restaurant or is it a bad thing that needs to go to housekeeping? And then they would get circulated. So it could easily be 3, 4, 5, a week, you know, 5 days later, a week later before someone's actually getting back to the guest maybe by phone, maybe by email, maybe even by letter if that's the only way that we had to reach them. So it was so much slower and now you've got immediate, you know, a guest checks out and on their way to the airport they're on their phone, 'that hotel, I can't believe this happened to me'. And I better respond within minutes or, you know, an hour at least maybe because otherwise people will be looking at that and saying, 'oh, I'm not gonna book at that hotel'. So the speed with which you have to rectify and have it rectified online so that the world can actually see what the resolution is, it has increased incredibly. And it could be attached to a name as well so there's that pressure-- that's increased pressure that I'm not anonymous anymore and someone is going to be able to very immediately react to my service.

SHAWNE McKEOWN: Voice activated customer service tools will likely reduce calls to the concierge. In June, 2018, Amazon rolled out Alexa for hospitality with Marriott International.

DONNALU MACDONALD: Alexa for hospitality can open your drapes, turned down the lights, play your music playlist. And I assume there's probably some way that you could even have your home play lists connected. I can use Alexa to order two extra towels, to get some more shampoo or whatever it is that I might need and it's all going to integrate with the hotel system. So it was interesting, they talked about having Alexa allowed the hotel to focus on guest interactions that matter the most. So it's not saying, you know, Alexa is gonna take away all of your people but it's saying get rid of the routine stuff; get rid of the things that are repetitive that don't require skills and focus on what a guest still needs because I think that's important to remember.

SHAWNE McKEOWN: The Henn-na Hotel opened in 2015 in Nagasaki, Japan staffed by 243 robots including luggage machines, virtual assistants and a front desk velociraptor. In January,

2019, it was reported the hotel fired half its robot staff because the machines caused more problems than they solved. Full-on robot resourcing wasn't entirely successful in this particular case but what role could robots play in the hospitality industry?

DONNALU MACDONALD: It depends on the kind of traveller. It depends on the kind of traveller as to how maybe interested they'll be dealing with a robot or dealing with a person. So if I'm a road warrior and I'm on the road all the time, I could care less if I talked to someone. Facial recognition sees me coming in, sends something to my phone that tells me, 'you're going to room 222 today' and I can check into the room with my phone, I can pay. So if you've got the road warrior, they're going to be okay with absolutely all of that technology assisting their getting in and out as quickly as possible with all the things that they normally want. Whereas the family on vacation, they're like, they don't know what they want. They need a lot more assistance and maybe that's part of their experience too is being able to talk to the person checking them in or meeting their room attendant.

SHAWNE McKEOWN: How about when it comes to cleaning and turning over rooms?

DONNALU MACDONALD: There really isn't a good way yet for housekeeping to be completely replaced by a robot. There's a Toyota robot that when you look-- and I don't know of any hotels that are using it but when you watch it trying to clean up a room and it uses, you know, a camera to sort of look at stuff on the floor and go 'okay, what's this? This is where this needs to go'. It's so incredibly slow and when I'm watching the video thinking, a person could do this so much faster. But where I have heard of-- and this isn't even very advanced technology, but it's kind of-- I guess it's a first step, Novotel has beds in their rooms that have a base that raises the bed so that when someone's making the bed they don't have to bend over to make it. So that, you know, one of the big things in housekeeping with people making potentially 25, 30 beds today is the wear and tear on the human body. So this ability to have a bed that comes up to your level and actually that's one of the things that apparently is built into it is that the employee has their ID card and there's some kind of interface that says, 'this is Donnaldu making up this room. Well, she's 5'10" and so we need to raise the bed to a certain level. Whereas if it's Marylou and she's only 5'2", the bed doesn't have to be risen to the same level. So that it's ergonomically more comfortable for the person. I don't know of any robot that can currently make a bed.

SHAWNE McKEOWN: It's technology complementing the job of the human and so that might be able to help them hit their targets for that.

DONNALU MACDONALD: Or to do different things than to be able to enhance the things that perhaps only a human can do if there is anything left that only a human can do. But allow them to focus on different things in the room.

SHAWNE McKEOWN: Right.

DONNALU MACDONALD: And this isn't about technology but one of the ways that some rooms or some hotels are changing is that they're starting to put in bunk beds. So again, there's a couple of hotels in New York that I've seen where, you know there, it's quite a high-end looking hotel but they've got bunk beds because they're trying to maximize the use of the space. So we may not have large amounts to room to make all of these different rooms so if I can actually put three or four people into a smaller space because of the use of bunk beds. But that, you know, I'm thinking, wow, that room looks so cool. How does a room attendant make up the bed when it's a bunk bed? Because now not only are you having to make up the bed the way we want it to standard, we're now doing it standing on a ladder. So when I'm thinking about the use of bunk beds, if that is a trend that might proliferate, how might a robot help prevent accidents? How might a robot help facilitate that kind of new way of setting up a room?

SHAWNE McKEOWN: On the food and beverage service side of things, robots have been shaking it up for some time now. Royal Caribbean Cruises launched its bionic bar in 2014 featuring two robot arms that pump out up to 1000 drinks a day. There are food service robots that can flip burgers and make pizzas. There's also a robot named Sally that's making waves. Sally creates fresh food products like salads and grain bowls. I talked to Nolan Schachter, the V.P. of Customer Success at Chowbotics, the American company that makes Sally. Here's part of our phone conversation.

NOLAN SCHACHTER: It's really about just access to that fresh food in 24/7 settings, whether it be in a healthcare facility where, you know, the majority of healthy food or fresh food in general is inaccessible after the cafeteria closes.

SHAWNE McKEOWN: Oh. Did we mention he's a George Brown College marketing grad? He is. Chowbotics bills Sally as the world's first fresh food robot. Sally is about the same height as a vending machine and there are storage containers inside that hold individual fruits, vegetables and other ingredients. And it dispenses those ingredients based on customers touchpad screen selections. Nolan says Sally is a great solution for hospitals and college and university campus; settings where there aren't fresh food options after the cafeterias close. Is Sally going to come for your food service job?

NOLAN SCHACHTER: We're about making fresh food more accessible and really, if we do our jobs right, we're actually gonna need more kitchen workers to do the prep that's required for the food to go into Sally. You know, if you think about it a college or university campus, they might have their one main dining facility but now we're adding on, you know, maybe two or three additional fresh dining locations on the campus and those you know still definitely require-- there's a labour component into the upkeep and maintenance of Sally. There might be locations that, you know, Sally is operated from a commissary kitchen and in that case, we wouldn't be necessarily removing the labour component, we'd just be adding the freshness component.

SHAWNE McKEOWN: And there are other jobs Nolan says. Ones like his. Making sure customers are satisfied with the robot they've purchased and there are marketing opportunities,

engineering, user interface design, hardware engineering, the list goes on. Sally also provides interesting data points.

NOLAN SCHACHTER: But then even from a health and safety standpoint, what's really needed-- Sally is monitoring the internal temperature every minute. And so you'll never serve food that is outside of safe operating realms because it's all fully automated. And similarly, when you're loading an ingredient into Sally, you're also automatically setting that expiration date for that ingredient. So you've got a longer shelf than you would in an open container that is typically only cooled from the bottom so it's actually only chilling, you know, half of the ingredients and the other half are exposed to the air and people potentially coughing or sneezing or what have you on the ingredient directly. But everything is kept in our crispers locked away in the refrigerated unit. So you get all that data, you know, ingredient expiration dates, the internal temperature log that's, you know, historical so a health inspector can export that information for any time period that they choose and then all the traditional, you know, sale data and usage statistics.

SHAWNE MCKEOWN: And here's Donnalú on analytics and data mining in the hotel sector.

DONNALU MACDONALD: You know, if we had that ideal world where maybe a robot is in the room doing the hard physical work and there's a person maybe the person is able to work with the robots data analytics to remember everything about you from the last time you were here. Or even bigger, if you see, you know, if you're a Marriott customer and you're a Marriott Bonvoy member, we now know what you've done in every Marriott you've ever stayed at and all of the other products that is associated with Marriott so that, 'oh yeah, three to four times you request a feather pillow but not when she's got her husband with her so he must be allergic.' So we'll now know that when she's travelling on our own, we put feather pillows in the room but if it's a reservation for Mr. and Mrs. Or, you know, then we're not gonna put feather pillows because we now know that he must be allergic or something like that. So I could see the mining of the information about clients becoming so much deeper but also faster and more nimble that we can make that kind of judgment call or the system can even make that kind of judgment call.

SHAWNE MCKEOWN: So this data could help hotels provide hyper-personalized experiences and predict and prepare for their customers' needs before they have to ask. This is just one of the strategies the industry can use to compete with home sharing services and there are new players such as LockTrip that could disrupt the disruptors. LockTrip is a blockchain accommodation service that cuts out the middle person and their commission fees.

DONNALU MACDONALD: So, you know when you're talking about disruptive technologies, that might even disrupt. booking sites like Expedia because they are using PayPal and credit cards and now we have a blockchain based one. So if we're moving towards crypto currency, will that then disrupt everybody that we thought was a disruptor? Because now they've got a different kind of payment technology that people are more comfortable with.

SHAWNE McKEOWN: Shameless plug alert: check out Episode 9 where we dive into the world of blockchain.

[music]

SHAWNE McKEOWN: It's time to take a look at the future want ads.

CHILDREN: Yay!

SHAWNE McKEOWN: Yes, kids. Listen up because these could be the jobs you'll be applying for when you grow up. In this segment, one of our guests outlines a job they think should exist in the future. Okay, Donnalú. What have you got for us?

DONNALU MACDONALD: Room personalizer. I guess that was the best because I sort of said room presenter, room butler, room personalizer.

SHAWNE McKEOWN: What skills or education will be required for this job? So this would be the new version of what a room attendant has been and it implies or it requires that we have technology to help the room attendant clean the room. So by taking away the more physical, onerous parts of the job that cause repetitive strain injury; that maybe make people not want to work in housekeeping which can be a challenge in some places at sometimes. So take away those parts of the job and then the room personalizer is working in conjunction with the robot to make sure that things are being cleaned but also in preparing the room for a specific customer. So right now, we're probably more focused on just preparing a room and then when the next person checks in, we provide that. But now we want to prepare a room for a specific customer knowing what their requirements are from previous stays at either our company or whether maybe we have access to some other vast database of information so that we maybe only put diet soda in the mini-bar because we know that this person only drinks diet soda and then decaf coffee in the coffee basket and no cream or sugar 'cause they drink their coffee black. So we can completely customize what goes into that room. How do we set up the kitchen-- not the kitchen, the bathroom counter because especially if we've got someone who stays with us for quite a long time, people have a way that they like to set things up? And usually if it's the same room attendants cleaning the room day after day, they kind of get, 'okay, this is what the guest wants'. Whereas if you're staying in a hotel currently, you know, different room attendants can just sort of do things differently. Well, now we're gonna do it your way. So we'll know how you've set your counter up in the past and that's how we're going to do it so you like your toothbrush in a cup, we'll put your toothbrush in a cup. If you put all your amenities on a face cloth, we're gonna put all your amenities on a face cloth. So that hyper-personalization that we could get from data mining is what the room personalizer would do.

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SHAWNE McKEOWN: And that's a wrap on this episode of Work Shift. What did you think? Email us at workshift@georgebrown.ca and we might share your thoughts on our next episode.

This podcast is brought to you by the fine folks at George Brown College. I'd like to thank Donnal Macdonald and Nolan Schachter for sharing their thoughts with us. It's the end of your work shift. Thanks for listening and if you liked what you heard, please subscribe.