The use-case for implementing voice assistant services in hotels

Jens Kastensson, CTO of ProKNX was recently interviewed to enable us to better understand the pressing need of the hotel industry to develop and implement the use of smart assistants in their rooms of their guests.

1. **How can you describe the current role of digital voice devices in hotel services?**

   In 2018 Amazon attempted to introduce voice control with Alexa into hotel rooms. Initially, during trials, it seemed to be a successful enterprise, which hotel guests rated as increasing the satisfaction of their stay when the smart assistant was used. However, shortly after the launch some critical articles started to appear due to clients being distrustful of the possibility of hotels recording and storing their data. To date, primarily because of this issue, hotels have not embraced the new smart technology, although it is a very beneficial addition to any hotel.

   At ProKNX, we believe that the privacy of customers should be of paramount importance, which is why we developed our product, Aragon, a smart assistant system for hotels that works completely offline. This means that no data is recorded or stored. There is no danger of privacy breaches, as there are no saved utterances stored on the devices. With Aragon, the hotel guest and the hotel itself can enjoy all the benefits of a smart assistant without the concern about privacy.

2. **Which service tasks in hotels, in your opinion, can be automated with voice devices?**

   There are many hotel services that can be automated by using a digital voice device that make the stay of a guest more comfortable and personalized. With vocal commands, the guest can operate the lighting, dimming, heating, and

air conditioning in a hotel room from the comfort of a bed or chair, with just a few words. They can also ask for room service, order cleaning, and control media devices using a voice-controlled assistant. ProKNX has developed a rich set of Hospitality features, such as "Do Not Disturb", "Make up my room", "Wifi access code query", audio and media control, and even developed a system to allow anonymized Internet searches for nearby restaurants, points of interest in the area the hotel is situated, and more.

3. **What are the differences in integrations of in-room voice devices in various types or sizes of hotels?**
   A single room can be controlled with one Aragon device, the 'Base unit'.
   A multi-room suite will require one base unit and one or more satellites. The base unit implements the intelligence. The satellites are 'dumb' and relay all requests to the base.

   For Aragon, the setup is simple no matter how large the hotel is as each unit is connected by PoE, meaning only one cable is needed for both the ethernet and electricity to allow them to function. Each unit is recessed in the wall, which is also an advantage in the hotel industry as the device cannot be removed from the room, dropped, or otherwise tampered with.

4. **Please name and describe the advantages and disadvantages for the adoption of voice-activated devices for a hotel.**
   The advantages are:
   - that the hotel guests can have a more personalized service. For example, speaking for our product, Aragon, the assistant can understand multiple languages, therefore the guest can speak to the device in their preferred language. For requests such as asking for room service, for a wake-up call, or for controlling media devices, the guest is not lost because of translation issues. Their wishes will be understood by the assistant.

- In this time of concern about virus transmission, there is no need for guests to touch surfaces such as light switches, hotel telephones, remote controls, or alarm clock buttons
- The guest can easily dim or brighten the lights and change the blind or curtain position with few commands.

The disadvantages are:

- For all other assistants on the market, except for the ProKNX product, Aragon, there is a major concern about privacy. All other assistants use the internet and cloud storage to function. This means that they record the utterances of guests at all times, and send sensitive data to the cloud, where there is the potential for data harvesting, and privacy breaches to take place. Aragon works completely offline, therefore this disadvantage does not exist with our product.
- If the guest speaks a language that is not understood by the assistant, it makes it impossible for them to control their environment.

5. How can hotel guests benefit from having a smart speaker in their rooms?

A smart speaker is very useful to have in the rooms of the guests for a number of reasons. One that I have not mentioned in the answer to question two above is that it can be used throughout the hotel to inform guests quickly in case of an emergency. With Aragon, it is possible to push a voice message into a room, e.g. what to do if a fire alarm goes off.

6. Which functions of digital voice devices are most useful for hotel guests?

Speaking for what ProKNX's product Aragon can do, I think that the most important feature for guests is that they can speak to the device in their own language to ask for room service, concierge help, or other requests without

needing to call the front desk and struggle to communicate. The fact that Aragon works completely offline means that they can also have peace of mind that their wishes are being kept private.

7. **What is your opinion as to why some guests resist using smart speakers in rooms?**

As I mentioned in a previous answer, I believe that the largest resistance guests have to using smart assistants in their rooms is due to the fear of their privacy being compromised. Very frequently we all hear and read news about personal assistants constantly recording what their owners are saying, whether or not the utterances serve to activate a function of the device. We also hear about these recordings which are stored in the cloud being hacked into and data being stolen. This information makes guests very distrustful of smart assistants. Guests in hotels often want to be in complete privacy, and feeled spied upon if a conventional smart speaker is placed in their room. This is why we have developed Aragon, to counteract this concern.

8. **Speaking about the current COVID-19 pandemic, in what way may it affect guests' attitude to face-to-face service delivery?**

Guests in the near future will be far more reluctant to have face-to-face service delivery with hotel staff due to fears of virus transmission, especially when they are far from their hometown or country. At the present time, the fewer staff guests come into contact with is better for both the guest and for the staff themselves, as there is less human contact therefore less chance of virus transmission.

9. **How do you see the future of in-room digital voice assistants in hotels? Is it associated with a wider/ the same level of adoption of voice technology in hospitality?**

I think that in-room assistants will become far more prevalent in the future in hotels as it allows the hotel to offer a far more personalized service for each guest. It gives the hotel a large advantage as well in that the requests from guests can be channeled to a centralized system. This means that the requests can be dealt with more quickly and reliably, and the hotel staff can be deployed in a much more

efficient manner, saving costs for the hotel and higher satisfaction levels for the clients.