

IoT System in Hotel Industry: A Case of The Peninsula Hong Kong



Source: Pexels (2023)

Background

The Internet of Things (IoT) refers to a network of physical devices embedded with sensors, software, and other technologies for communicating and transferring data over the internet with other devices and systems (Oracle, n.d.). Over the years, hotels have been using IoT devices to enhance their service and provide personalized experience to their guests.

With the mission to provide a seamless experience interlinking all in-room functions, The Peninsula introduced the SOTI MobiControl system. The system allows guests to control all in-room facilities using tablets or panels provided. Moreover, guests can now move around freely and still enjoy their favourite shows through the in-room tablet instead of having to sit still in front of the TV (Lifestyle Asia, 2020).

On the other hand, the SOTI MobiControl also collects real-time data for personalizing amenities and services tailored to guest preferences while uploading and creating profiles for each guest (Hospitality Tech, 2017). This data provides valuable insights into guest demographics, interests, and spending power, which then facilitates targeted upselling to the guest's phone or display them on the in-room SOTI MobiControl.

Challenges

Although the ability to create demographic profile for each guest and make personalized service recommendations promotes convenience and customer loyalty, there are few concerns regarding the collection of guest information from the SOTI MobiControl device. The first one being the lack of consent before proceeding to monitor guests' activity on the tablet and building an interest profile for them. This significantly undermines the privacy of the guest. Furthermore, IoT devices are particularly vulnerable to cyber-attacks because most of them do not have encryption module by default. Credentials and other important information transmitted to and from the device can be easily intercepted if someone penetrates the network (Fortinet, n.d.).

Discussion Questions

1. How can hotels effectively communicate their data collection and usage policies to guests?
2. How can hotels protect guest information from potential cyber-attacks, given the vulnerabilities of IoT devices?
3. How may the use of IoT in hotels evolve in the future, and what new challenges might arise?

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Keywords

- Internet of Things (IoT)
- Smart technology
- Personalization
- Data collection
- Data privacy
- Cybersecurity risk

Acknowledgement

This case study is based on and adapted from the work of Master's student Marissa Patel from the School of Hotel and Tourism Management at The Hong Kong Polytechnic University

物联网系统在酒店业的应用：以香港半岛酒店为例



Source: Pexels (2023)

背景

物联网指的是一个由嵌入传感器、软件和其他技术的物理设备组成的网络，旨在通过互联网与其他设备和系统进行通信和数据传输 (Oracle, n.d.)。多年来，酒店一直在使用物联网设备来提升服务并为客人提供个性化体验。

为了提供无缝链接所有客房功能的服务体验，半岛酒店引入了 SOTI MobiControl 系统。该系统允许客人使用提供的平板电脑或控制面板来控制所有客房设施。此外，客人现在可以自由走动，并通过客房内的平板电脑继续欣赏他们喜爱的节目，而不必再静坐在电视前 (Lifestyle Asia, 2020)。

另一方面，SOTI MobiControl 系统还会收集实时数据，以便根据客人偏好定制个性化设施和服务，同时为每位客人上传并创建个人资料 (Hospitality Tech, 2017)。这些数据为了解客人的人口统计特征、兴趣和消费能力提供了宝贵的见解，进而有助于针对性地向客人手机推送增值服务或在其房间内的 SOTI MobiControl 设备上显示这些信息。

挑战

尽管为每位客人创建人口统计资料并提供个性化服务建议能够带来便利并提升客户忠诚度，但通过 SOTI MobiControl 设备收集客人信息仍存在一些值得关注的问题。首先，在开始监控客人在平板电脑上的活动并为其建立兴趣档案之前，往往缺乏明确的同意流程。这严重损害了客人的隐私。此外，物联网设备尤其容易受到网络攻击，因为大多数设备默认没有加密模块。如果有人侵入网络，设备传输的凭证和其他重要信息很容易被截获 (Fortinet, n.d.)。

讨论问题

1. 酒店应如何有效地向客人传达其数据收集和使用政策？
2. 考虑到物联网设备的固有脆弱性，酒店应如何保护客人信息免受潜在的网络攻击？
3. 未来酒店中物联网的使用可能会如何演变？可能会出现哪些新的挑战？

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关键词

- 物联网
- 智能技术
- 个性化
- 数据收集
- 数据隐私
- 网络安全风险

致谢

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物聯網系統在酒店業的應用：以香港半島酒店為例



Source: Pexels (2023)

背景

物聯網指的是一個由嵌入感測器、軟體和其他技術的物理設備組成的網絡，旨在通過互聯網與其他設備和系統進行通信和數據傳輸 (Oracle, n.d.)。多年來，酒店一直在使用物聯網設備來提升服務並為客人提供個性化體驗。

為了提供無縫鏈接所有客房功能的服務體驗，半島酒店引入了 SOTI MobiControl 系統。該系統允許客人使用提供的平板電腦或控制面板來控制所有客房設施。此外，客人現在可以自由走動，並通過客房內的平板電腦繼續欣賞他們喜愛的節目，而不必再靜坐在電視前 (Lifestyle Asia, 2020)。

另一方面，SOTI MobiControl 系統還會收集實時數據，以便根據客人偏好定制個性化設施和服務，同時為每位客人上傳並創建個人資料 (Hospitality Tech, 2017)。這些數據為了解客人的人口統計特徵、興趣和消費能力提供了寶貴的見解，進而有助於針對性地向客人手機推送增值服務或在其房間內的 SOTI MobiControl 設備上顯示這些信息 (Fortinet, n.d.)。

挑戰

儘管為每位客人創建人口統計資料並提供個性化服務建議能夠帶來便利並提升客戶忠誠度，但通過 SOTI MobiControl 設備收集客人信息仍存在一些值得關注的問題。首先，在開始監控客人在平板電腦上的活動並為其建立興趣檔案之前，往往缺乏明確的同意流程。這嚴重損害了客人的隱私。此外，物聯網設備尤其容易受到網絡攻擊，因為大多數設備默認沒有加密模塊。如果有人侵入網絡，設備傳輸的憑證和其他重要信息很容易被截獲。

討論問題

1. 酒店應如何有效地向客人傳達其數據收集和使用政策？
2. 考慮到物聯網設備的固有脆弱性，酒店應如何保護客人信息免受潛在的網絡攻擊？
3. 未來酒店中物聯網的使用可能會如何演變？可能會出現哪些新的挑戰？

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- 個性化
- 數據收集
- 數據隱私
- 網絡安全風險

致謝

本案例研究基於並改編自香港理工大學酒店及旅遊業管理學院碩士研究生 Marissa Patel 的作品。