Regent Singapore, A Four Seasons Hotel
RFID UNIFORM PROJECT PAVE (PEOPLE-LESS AUTO-VALET EQUIPMENT)

SUMMARY

OPPORTUNITY
- Utilise RFID technology to:
  - Eliminate manual counting, sorting and recording of both used and cleaned uniforms throughout the entire laundry process.
  - Increase staff access to uniforms for all shifts and reduce wait time during peak periods.
  - Track uniforms through an automated inventory system to increase accountability.

ACTION
- With the support of STB, Regent Singapore implemented a 24-hour Automated RFID Uniform System in its existing Uniform Room
  - The Uniform Room was converted into a fully automated area, utilising two conveyor systems which track uniforms using RFID tags and bar codes that were incorporated on all uniforms.
  - Two staff collection doors were installed and RFID cards were issued to all staff, allowing them to self-collect uniforms from the automated conveyor systems.

RESULTS
- This implementation allowed for automated uniform drop-off/collection for staff, which served to reduce significant manual operations from the Uniform Team.
- With this system, uniforms are accounted for and all uniforms issued can be tracked. Uniform items that were unreturned or had issues are also highlighted and reviewed for further action.
- The 24-hour automated system with self-collection by staff also served to support the high collection volumes during peak collection periods and reduced overall waiting times for staff.
- The uniform team was able to focus on delivering value-added tasks such as ensuring the quality of uniforms or the rectification of defects.
- 25% reduction in manning required for the uniform and linen room - from four staff to three staff.

OPPORTUNITY

SEEKING INNOVATIVE WAYS FOR UNIFORM INVENTORY TRACKING AND MANAGEMENT

Regent Singapore, A Four Seasons Hotel has 400 uniformed employees along with a varying number of part timers and contracted employees – with each staff member having a minimum of three uniforms allocated to them. In the current process, staff will collect their uniforms at the beginning of their shift from the Uniform Room manned by the Uniform Team, and drop-off the used uniforms at the end of the shift. In this process, all uniforms will have to be manually tracked, sorted and counted before being issued to staff or sent to the laundromat. This process allowed for only one staff member to be attended to at each time. Additional headcount for the Uniform Team was also required during the overnight shift if uniform items required to be collected then.

In addition, missing uniforms which arose either because employees did not return their items, or the uniforms were still at the laundromat often created bottlenecks, especially during peak periods when there were changes in shifts. This resulted in a longer wait time for uniform collection, which also resulted in frustration from staff.

The current process is labour-intensive and with the high volume of uniforms circulating in and out of the Uniform Room each day, it presented the Hotel with an opportunity to streamline and automate the process.

In view of the above challenges and opportunity, and the availability of support from STB, Regent Singapore made the decision to embark on alternatives to automate its uniform management in an effort to increase productivity.
In early 2015, the Hotel began looking into possible solutions to boost efficiency for the Uniform Team. This was based in part on the experience from other Four Seasons properties and Conrad Hotel Singapore. When the opportunity to implement an automated system surfaced, it was also further bolstered by the Hotels’ laundry supplier, Zero Spot, who were already partnering with a supplier to introduce this to hotels locally.

The RFID system allows for the automated counting, sorting and tracking of uniforms, as well as the automated collection and drop-off of uniforms by staff, which reduces significant manual operations and the reliance on manpower in the uniform team. Thus, existing manpower can be channelled towards other value-added tasks such as ensuring that uniforms are in excellent condition.

The system has two separate conveyor belts that allow for dual collection of uniforms at any one time. The two collection points also serve to overcome bottleneck and waiting times during peak collection periods such as when the Hotel’s larger departments change shift at the same time.

Staff are issued RFID cards which will allow them to automatically self-collect their uniforms by tapping their cards at the collection panel. The card also doubles as a Staff ID pass, and for relevant staff, it also works as a room master key.

During the returning of uniforms at the end of shifts, staff simply drop off their uniforms in an RFID enabled chute. This allows for the automatic tracking of the uniform and ensures an immediate recording of what has been sent to the laundry vendor for washing.

**KEY STEPS**

**Construction / Hardware Installation:**
- Prior to construction, the supplier conducted a full review of the entire Uniform Room to ensure a smooth upgrading process.
- An ongoing timeline was also shared among all teams to ensure implementation of the system remains on track.

**Tagging the Uniforms:**
- All uniforms were tagged with an RFID tag and barcode prior to implementation.
**Key Success Factors**

- **Management Team/ Owner Support:** Support from the Hotel’s group ownership and Senior Management Team were key to the successful implementation of the project. This support was achieved after the Hotel presented the project proposal and the benefits this system can bring to raising productivity and efficiencies in a manpower-intensive area.

- **Well-planned timeline and effective training:** A well-planned implementation timeline which included a staggered roll-out beginning with a trial period to test the new system with two to three departments. This also allowed for the quick and effective training of the Uniform Room Attendants and all staff within a week.

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**Project period:** The project was implemented over a 3 month period, consisting of the construction and installation of the automated system, conversion of the Hotel’s Uniform Room, and the training of all Attendants and staff.

**Estimated cost:** Approximately S$130,000.

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**RESULTS**

**IMPLEMENTING AN AUTOMATED SYSTEM INCREASES EFFICIENCY AND ANALYTICS**

- **Time saved for Uniform Room Attendants and Hotel Employees:** Significant time and man-hours saved for the Uniform Room through the automated tracking, sorting and counting of uniforms. The Hotel also no longer requires an attendant to be stationed in the Uniform Room to serve staff as the system is fully automated. Uniform Attendants are now able to focus on value-added tasks such as uniform quality or providing colleagues with assistance such as alterations. Overall, there is a 25% reduction in manning required in the Uniform Team.

- **Reduced time spent waiting by Hotel Employees:** The waiting time for uniform pick-up and drop-off has decreased from 2 minutes to just 40 seconds with the implementation of the automated system. This reduction in waiting time has supported the collection of uniforms during peak periods such as when staff from large departments change shift at the same time. Employees can now also receive their uniforms round-the-clock 24/7.

- **Tracking/ Analysis of Uniforms:** The automated system allows the Hotel to account for the usage of uniforms, easy tracking and follow-up with uniform issues and also help them to better plan for contingencies. For example, the Hotel can now compare the number of used uniforms per day to the day’s laundry cost to ensure that there are no bill discrepancies.