



Implementation of Self-Payment Kiosks (SPKs) at TTSH Eye Clinic

Tan Tock Seng Hospital

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The Self-Payment Kiosks (SPK) are digital kiosks which allow patients to make payment for their medical bills after their visits in the clinic. The implementation of SPKs was piloted at Clinic 1A (Eye Clinic) in Tan Tock Seng Hospital (TTSH).

With the implementation of the SPKs in Clinic 1A, patient wait time has reduced tremendously by 70%, and the error rate of payment collection has reduced by 100%, hence improving patient and staff satisfaction.

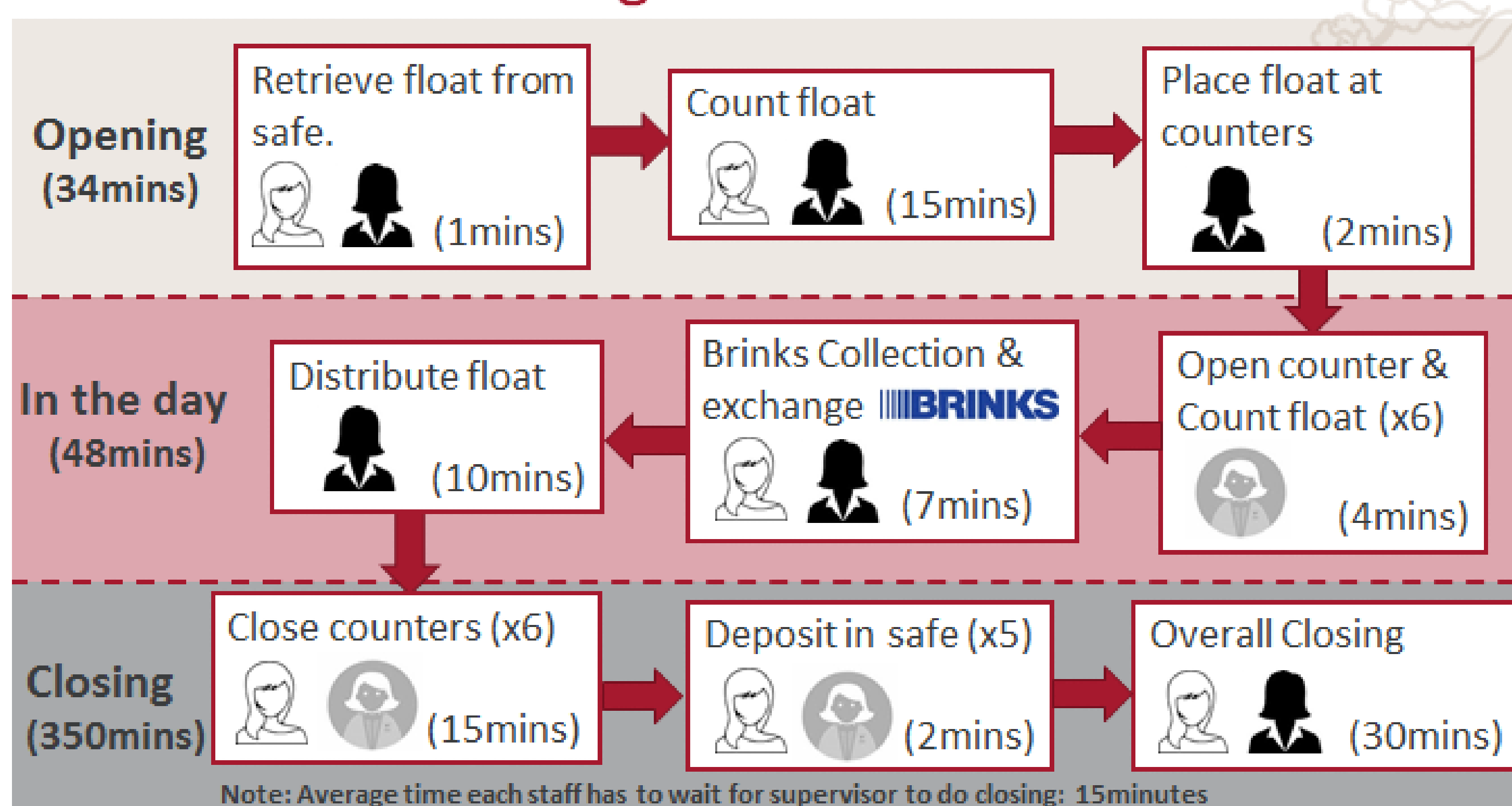
Problem

150,000 patients are seen annually in TTSH Eye Clinic, resulting in long waiting time for patients, such as at payment counters.

Indicator	With Payment Counters
Average transaction time for payment	3 minutes
Average wait time for payment	10 minutes <i>*Maximum: 1 hour</i>
Average no of correction memos per month	23
FTE required	6

Collection of payment at counters manned by staff meant that staff will have to conduct opening and closing of counters – a process where cash collected have to be counted, tallied, and verified by both the counter staff and supervisor manually. This process is tedious and laborious. In addition, the heavy load and fast-paced setting resulted in frequent human errors, which led to more paperwork to record these discrepancies (correction memo). These manual processes have been identified as the key reasons for mistakes and rework and hence affecting the waiting time at the payment counters.

Current Cash Counting Process



Total Cash Counting = 7.2hrs/day

Strategy

Kotter's 8-Step Change Model:

1. Create a sense of urgency
2. Build a guiding coalition
3. Develop the Vision
4. Communication for buy-in
5. Enable action by removing barriers
6. Generate short term wins
7. Sustain acceleration
8. Institute change (make change stick)



Results

After the SPK was launched at Clinic 1A, improvements were seen:

Indicator	With Payment Kiosks
Average payment transaction time	Less than 1 minute
Average payment wait time	Less than 3 minutes
Average no of correction memo per month	0
FTE required	3

In addition, intangible benefits include:

1. Increase staff satisfaction
2. 1-Bill-1-Queue rate has also improved
3. Alignment with our country's movement towards a SMART nation.
4. More space – creation of 2 more clinic rooms for services