# John Readings Pty Ltd. Picking KPI Calculation Templates

**Identify Impact of changes to KPI rate on projected staff hours and costs.**

Use the attached monthly spreadsheet to review how the proposed KPIs would affect the number of staff hours and errors:

Current error rates are 4% for miss picks and 2% for short picks. After consulting with team leads in the Picking area and you believe it is very likely the error rates would increase by 2% if KPIs are increased (to carton rate of 260 picks per hour), and reduce by 1% if KPIs are reduced (to carton rate of 180 picks per hour). Assume an estimated pick cost error of 11c per carton for all three scenarios.

Step 1: Open the spreadsheet file,

Step 2: Go to the ***Total Menu*** sheet,

Step 3: Enter the data into the yellow boxes in the Unit Pick Rate section (peach in colour),

Step 4: Copy the information into the boxes provided,

Step 5: Investigate and record the data for the different KPI proposals by repeating steps 3 and 4.

In each of the tables below, record the number of staff hours, full time equivalent (FTE) staff, and error costs using an individual unit pick of three rates: 220, 260 and 180 cartons per hour using the error rates as indicated above.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Current KPI (220 picks per store-person per hour)** | | | | | |
| **Picking Rate** | | | | |
|  | Unit Pick |  | Bulk Pick |  |
|  | 220 |  | 800 |  |
|  |  |  |  |  |
| Cartons Picked |  |  | 87441 |  |
|  |  |  |  |  |
| Hours |  |  | 109.30 |  |
|  |  |  |  |  |
| FTE |  |  | 0.72 |  |
| **Average Error Rate percentage** | | | |  |
| Miss Picks | Unit Pick |  | Bulk Pick |  |
|  | 4.00% |  | 2.00% |  |
|  |  |  |  |  |
| Errors |  |  | 1698 |  |
|  |  |  |  |  |
| Hours |  |  | 0.02 |  |
|  |  |  |  |  |
| FTE |  |  | 0.00 |  |
|  | Unit Pick |  | Bulk Pick |  |
|  |  |  |  |  |
| Short Picks | 2.00% |  | 1.00% |  |
|  |  |  |  |  |
| Errors |  |  | 849 |  |
|  |  |  |  |  |
| Hours |  |  | 1.06 |  |
|  |  |  |  |  |
| FTE |  |  | 0.01 |  |
|  |  |  |  |  |
|  | Est Cost / carton |  | $ 0.11 |  |
|  |  |  |  |  |
| Estimate cost for fixing errors | |  | $ 2,851.16 |  |
|  |  |  |  |  |
| **Total picking hours** | |  |  |  |
|  | Actual |  | Estimate |  |
| Hours | 2149.20 |  | 1984.11 |  |
|  |  |  |  |  |
| FTE | 14.14 |  | 13.05 |  |
|  |  |  |  |  |
| **Proposed KPI: Increase (260 picks per store-person per hour)**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Picking Rate** | | | | | |  | Unit Pick |  | Bulk Pick |  | |  | 260 |  | 800 |  | |  |  |  |  |  | | Cartons Picked |  |  | 87441 |  | |  |  |  |  |  | | Hours |  |  | 109.30 |  | |  |  |  |  |  | | FTE |  |  | 0.72 |  | | **Average Error Rate percentage** | | | |  | | Miss Picks | Unit Pick |  | Bulk Pick |  | |  | 6.00% |  | 2.00% |  | |  |  |  |  |  | | Errors |  |  | 1698 |  | |  |  |  |  |  | | Hours |  |  | 0.02 |  | |  |  |  |  |  | | FTE |  |  | 0.00 |  | |  | Unit Pick |  | Bulk Pick |  | |  |  |  |  |  | | Short Picks | 4.00% |  | 1.00% |  | |  |  |  |  |  | | Errors |  |  | 849 |  | |  |  |  |  |  | | Hours |  |  | 1.06 |  | |  |  |  |  |  | | FTE |  |  | 0.01 |  | |  |  |  |  |  | |  | Est Cost / carton |  | $ 0.11 |  | |  |  |  |  |  | | Estimate cost for fixing errors | |  |  |  | |  |  |  |  |  | | **Total picking hours** | |  |  |  | |  | Actual |  | Estimate |  | | Hours | 1876.79 |  | 1755.28 |  | |  |  |  |  |  | | FTE | 12.35 |  | 11.55 |  | |  |  |  |  |  | | | | | | | | |

**Proposed KPI: Decrease (180 picks per store-person per hour)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Picking Rate** | | | | |
|  | Unit Pick |  | Bulk Pick |  |
|  | 180 |  | 800 |  |
|  |  |  |  |  |
| Cartons Picked |  |  | 87441 |  |
|  |  |  |  |  |
| Hours |  |  | 109.30 |  |
|  |  |  |  |  |
| FTE |  |  | 0.72 |  |
| **Average Error Rate percentage** | | | |  |
| Miss Picks | Unit Pick |  | Bulk Pick |  |
|  | 3.00% |  | 2.00% |  |
|  |  |  |  |  |
| Errors |  |  | 1698 |  |
|  |  |  |  |  |
| Hours |  |  | 0.02 |  |
|  |  |  |  |  |
| FTE |  |  | 0.00 |  |
|  | Unit Pick |  | Bulk Pick |  |
|  |  |  |  |  |
| Short Picks | 1.00% |  | 1.00% |  |
|  |  |  |  |  |
| Errors |  |  | 849 |  |
|  |  |  |  |  |
| Hours |  |  | 1.06 |  |
|  |  |  |  |  |
| FTE |  |  | 0.01 |  |
|  |  |  |  |  |
|  | Est Cost / carton |  | $ 0.11 |  |
|  |  |  |  |  |
| Estimate cost for fixing errors | |  |  |  |
|  |  |  |  |  |
| **Total picking hours** | |  |  |  |
|  | Actual |  | Estimate |  |
| Hours | 2542.68 |  | 2357.91 |  |
|  |  |  |  |  |
| FTE | 16.73 |  | 15.51 |  |
|  |  |  |  |  |