PULSE. ERROR REDUCTION

Some Harsh Figures

One of the ultimate realities in business is that the cost of doing things incorrectly is generally greater than it is for doing them right. Thus, in recent Australian analysis within the arena of logistics, it was estimated that the additional base cost for each and every warehouse error lay between $50 and $150.

The figure took into account the steps needed to recover and erroneously shipped item, handle its return, and manage all of the necessary corrections to relevant company records. Even then, the cited expenditure was seen as only the tip of the total iceberg.

It could not, and therefore did not, attempt to measure the obvious impact of errors on customer satisfaction and on the demands made of sales staff's time needed to pacify unhappy clients. Nor did it attempt to become industry or company specific by estimating the even greater impact of mistakes where things such as export sales, contract penalties or perishable products were involved.

But even without such loadings, error overheads impact profit alarmingly. As worrying as the cost of individual mistakes is, so too is their frequency. Here further studies suggest that typical error rates are between 3 and 5 percent. Even firms achieving the lower rates often fail to do so consistently, particularly at pressure points such as month-ends.

It is also a fact that all too frequently problems grow when they are singularly least appropriate. New marketing thrusts, new product introductions, and new customers will generate more warehouse workload, where errors can totally negate the investment that's been made to win new business.

When combined, the arithmetic of such harsh figures shows that with a 3 percent error rate, a base error cost of just $75 and (say) 5000 transactions per month, then what is being talked about is a monthly cost of mistakes of $11,250. And that is just for the privilege of getting things wrong.

Reducing Error Rates to 0.1 Percent or Less

Some human error is, of course, unavoidable. However when the sorts of rates that have just been noted are observed, much of the blame must be placed upon the systems that are in operation. Of great importance, and great comfort, is that these latter problems can now be overcome.

With ***PULSE.WMS***, user experience shows that it is possible to consistently achieve 99.9 percent or better accuracy. This is achieved by integrating into the Warehouse Management System a range of modern tools and proven procedures.

Facilities such as individual item tracking; barcoding for easy product and location identification; cross checking and monitoring; and 'real time' processing and updating using data transmission via radio (RF) terminals. Facilities which when effectively combined, make 0.1 percent error rates or less a demonstrable reality.

The Path to Error Avoidance

In practise, such a reduction in mistakes is achieved via a combination of approaches. In picking alone these ensure:

- The absolute accuracy of location details
- The specific accuracy of stock levels in each location
- The accuracy of the picking process
- Totally up-to-date information that guarantees the warehouse is operating on current data, not best-guessed historical information
- That priorities are automatically handled, so picks can be actioned when they need to be
- The elimination of paperwork and its inherent transcription and interpretation errors
- The automatic control of such things as stock use by dates (which can also be automatically matched to individual customer's demands for varying expiry lead times)
- The similar control and consolidation of product batch or lot numbers on a customer-by-customer basis
- Serial number control

But of course, picking is but one part of the overall warehouse cycle in which errors can regularly occur. And given the absolute logic of getting it 'right from the start', the effective control of the receiving process is a further area in which ***PULSE.WMS*** makes a valuable contribution. Here avoiding errors is facilitated via the:

- Automatic checking against purchase orders, EDI/web reports or factory release data that what has arrived is exactly what was expected.
- Immediate recording of any discrepancies so identified, and the initiation of follow-up supplier action as defined by the user
- System's generation of receiving label barcodes (in addition to the supplier's own or where these are absent) so that precise product identification can continue to be made
- Automatic assignment of goods to their immediate point of holding (e.g. inspection, quarantine, pick location, reserve stock)

Under this latter process, the system decides to where a particular item should be directed under user defined parameters. The putaway is then assigned by ***PULSE.WMS*** to the most appropriate warehouse operator/equipment combination. In so doing:

- The operator will scan stock to be moved to ensure that the correct items are about to be handled. Errors are immediately trapped.
- Once at the putaway location, this is scanned to ensure it too is correct. Again any mistakes are immediately averted.
- Putaway paperwork and its unavoidable transcription errors are eliminated. So too are any delays in updating stock location records that would cause subsequent picking problems

At the other end of the entire warehouse operation, contributions to accuracy are equally present. Thus:

- Where wave or bulk picking has been used to generate efficiency and productivity, ***PULSE.WMS*** provides the further controls needed to carry out the subsequent splits into individual orders. This is done without extra staff or the risk of error
- Where an order has been split picked, automatic control monitors when it has been fully and correctly completed
- ***PULSE.WMS*** further controls the assembly of individual orders in terms of such things as despatch grid and delivery run numbers. Barcoding checks again ensure things go where they are supposed to, and conversely that nothing is accidentally placed where it should not be
- Error control right down to the individual shipment is provided by the generation of load and delivery details to assist with 'proof of delivery'
- And if required, such data can be made available for subsequent checking against transport company invoices, the help protect against other people's errors

The Avoidable Cost of Errors

1. Potential Costs associated with the Despatch of Incorrect Orders

Basic Costs of:
- Return Transport
- Inspection on Return
- Damaged Goods procedure
- Re-packaging
- Additional Data Entry
- Re-receiving Procedure
- Quarantine on return
- Damaged Goods Write-off
- Re-putaway
- Credit Note Procedures

Costs of (Correct) Replacement Order

- Re-picking
- Re-transportation
- Re-packing
- New Documentation

Intangible Costs
- Lost Business
- Sales Staff Effort
- Management Effort
- Compromised Customer Satisfaction

Situation Specific
- Export Transport Costs
- Perishable Goods Spoilage
- Customs Penalties for Incorrect Paperwork
- Contract Penalties

2. Other Potential Business Costs

- Loss of Repeat Business
- Loss of Customer Service Reputation
- Staff Dissatisfaction and Turnover
- Reduced Ability to Attract Best Staff
- Inability to Achieve Quality Standard Accreditation

PULSE.WMS
EFFICIENCY. ACCURACY. PRODUCTIVITY.

2011 Logistics Association Australia
Friend of the LAA

GS1 Australia
BUSINESS ALLIANCE PARTNER