

“The Ideal Equipment Selection Process”

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Problem: Manual materials handling (MMH) related injuries (especially musculoskeletal disorders and strains / sprains) continue to plague the Retail, Wholesale, and Warehousing (RWW) industries costing companies millions of dollars per year in workers compensation and process inefficiencies. With rising health care costs, an aging population, and obesity trend, such costs are projected to only increase in the years to come. Despite such a problem, most companies in the RWW sector have yet to change their MMH processes to reduce MSD risk and improve process efficiency.

Proposed Path-Forward: Below is an outline of proposed steps that RWW companies can take to improve their MMH processes and possibly get the “Biggest Bang for your Buck”:

1. Review injury/accident logs to help determine departments, job positions, and processes to focus on for implementing MMH improvement.
2. Discuss with corporate, store-level and department management to get their feedback on processes to observe or focus on for MMH improvement – creates “buy-in” from multiple levels of your organization.
3. Perform pre-intervention observation, task analysis, ergo risk factor identification & confirmation as well as basic time studies of targeted process(es) to prioritize tasks based on ergonomic risk and time spent (% of process) in an attempt to maximize potential ergo risk reduction and productivity improvement
4. Review current vendor products (e.g. MMH solutions) on the market that may address the tasks of concern
5. Propose possible solutions to corporate and site-stakeholders to gain input on which MMH solutions to trial
6. Work with MMH vendor(s) to provide existing product(s) and/or retrofit MMH solution(s) to the application/needs of RWW-specific processes
7. Introduce and train company stakeholders on the use of MMH solution(s), allow adequate phase-in time (8-weeks minimum) for company employees to use the solution(s) before collecting post-intervention data
8. Perform post-intervention observation, task analysis, ergo risk evaluation, time study, and collect subjective feedback from workers on usability (discomfort surveys may also prove beneficial)
9. Perform ROI estimates based on potential WC cost reduction (10-70% estimated depending on effectiveness of solution) based on ergo risk reduction and productivity improvements (Washington State Ergonomics Cost Benefit Calculator – <http://www.pshfes.org/cba.htm>)
10. Share results with corporate and site stakeholders to promote buy-in and discuss path-forward
11. Continue trialing solutions in 2-3 site locations for a minimum of 1-year and track actual store metrics (e.g. WC costs, OSHA recordables, accidents, first-aids, turnover, productivity, employee complaints, etc.) to determine actual ROI
12. If positive results (ROI, safety, productivity, morale, etc.) are shown from trial store locations, consider implementing solutions in additional store locations and/or company-wide.

NOTE: All RWW companies and MMH equipment manufacturers/vendors may NOT be able to complete all of these steps without outside help, but this is a suggested starting point to consider / discuss. If external help is needed, consider working with universities, NIOSH, and/or other consulting/practitioner groups to serve as facilitators of some of these steps and build collaborative partnerships.

