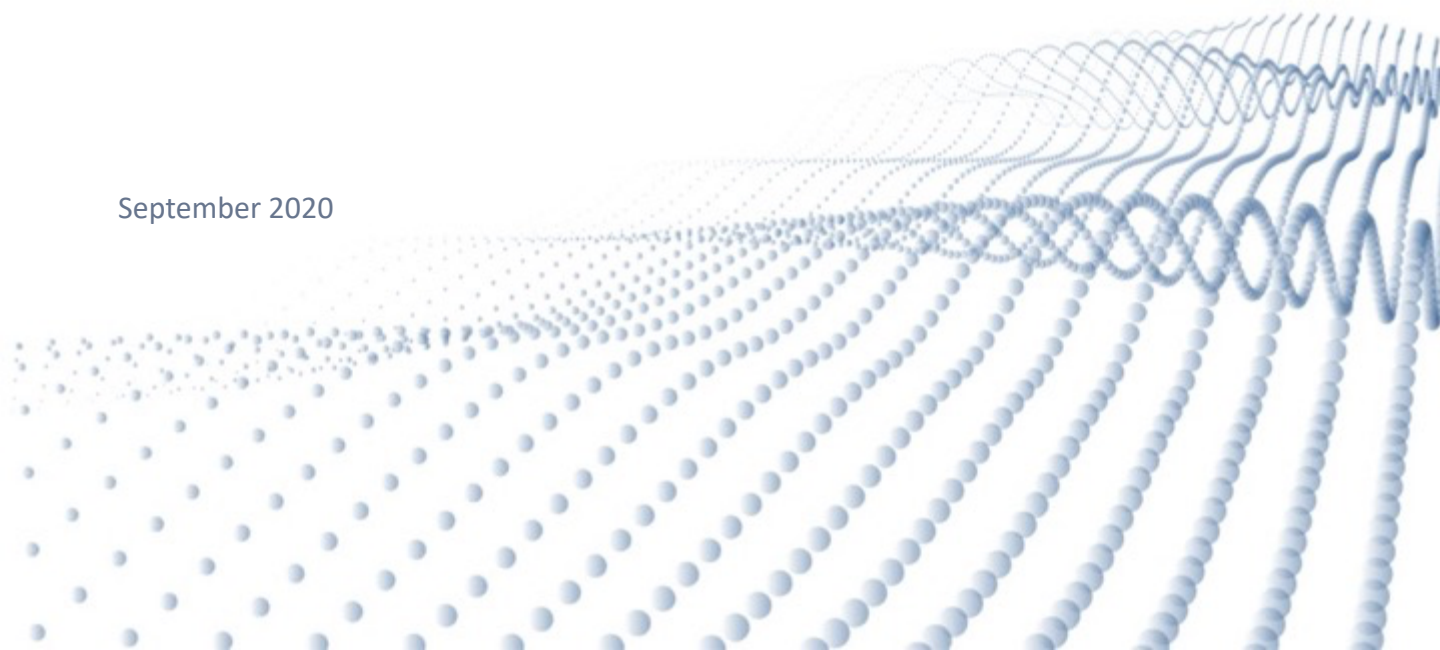




Realizing Savings From  
Efficient Facility Designs:  
An Apparel Distribution  
Company Case Study

September 2020





# About Kelmic

**Kelmic Consulting helps organizations capture opportunities and dramatically improve their operations.**

Helping our clients improve their operations since 2002

We partner with our clients to drive bottom-line impact by addressing and dramatically improving efficiencies in People, Processes, and Property. Our exceptional people draw upon more than 100 years of combined experience to bring you the right perspectives and expertise to help you tackle complex challenges and realize your strategic ambitions.



# Background

## About the Client

- North American wholesale apparel distributor
- Looking to establish a new distribution center in the greater Toronto area
- Required new Canadian facility to accommodate 14,000 SKUs and 50,000 boxes
- Limited real estate inventory in the Greater Toronto area market
- Planned to be fully operable in less than 9 months

Original facility estimated size

**120,000 to  
140,000  
sq ft**

A North American apparel distributor was servicing a growing Canadian demand from their US based distribution network. This was resulting in increasing delivery lead times and creating some challenges as competitors offered shorter order to shipment times.

With an expectation of double-digit growth prospects over the next 3 to 5 years, they decided to expand their distribution network into Canada by establishing a new distribution center in the greater Toronto area.

The client was operating two facilities with approximately 300,000 sq ft of warehouse space in the United States. Based off their experience in their US facilities, the client estimated they would require between 120,000 sq ft and 140,000 sq ft to accommodate 14,000 SKUs and 50,000 boxes with both piece and case picking.

Facility search had been on-going for 6 months with little results.

An initial SKU count of around 10,000 to 11,000 SKUs needed to be accommodated in approximately 40,000 boxes. Growth projections indicated that these would need to grow to over 14,000 SKUs in 60,000 boxes over the planning horizon. The new Canadian facility was required to accommodate the projected growth of inventory as well as future expansion plans for accommodating additions of embroidery equipment and other value-added services.

All out-bound shipping was to be through third party couriers, so a facility location in close proximity to their distribution hubs was preferred.

# Implemented Solution

Kelmic determined cube requirements based on potential inventory, sales analysis and growth projections.

Using an innovative, automated VNA man-up order picking system and utilizing flow through racking it was determined that the client could fit into a building of 45,000 sq ft. This saved the client over \$6 million in rent over the duration of the lease.

In order for this innovative solution to work the right building had to be selected based on building height, floor flatness, column spacing, office size and many other factors.

Kelmic expanded the search criteria to include smaller facilities. Several possible venues were identified and shortlisted. These were toured with the client and the best facility was selected and secured.

Kelmic developed the facility layout and racking configurations and specified appropriate lift equipment. Full operating procedures were established, and SOPs were created. Processes were mapped out and these were used to develop the functionality for the WMS implementation.

Kelmic managed the procurement process to select racking providers, installation contractors and coordinated all necessary tenant improvements including lighting relocation and battery charger installation. A full slotting plan was developed and loaded into the WMS.

In addition, the new office TI work was coordinated saving the client in excess of \$150,000 through a combination of value engineering and up-front negotiations.

The overall project had to be fast-tracked to meet the tight deadline and was completed with complete operational readiness 4 months following signing of the lease. The project was also completed \$200,000 under original budget.

Real estate savings realized over the lease term

**\$6 million**

Kelmic's proposed facility size

**45,000 sq ft**

Kelmic's efficient design reduced building footprint by

**60%**



3

4

# Key Results Achieved

- Reduced the size of the facility from 120,000 to 45,000 sq ft saving the client over \$6 million in lease costs
- Implemented automated man-up order picking system with carton flow rack to support:
  - 15,000 SKUs with individual pick faces
  - 66,000 boxes
  - 1.6 million items
- Integrated WMS system with auto navigated order pickers reducing labour requirement by over 45%
- Distribution center designable to handle double digit growth for next 10 years

ROI

8:1

**45,000**  
sq ft

New DC established

**\$6**  
million

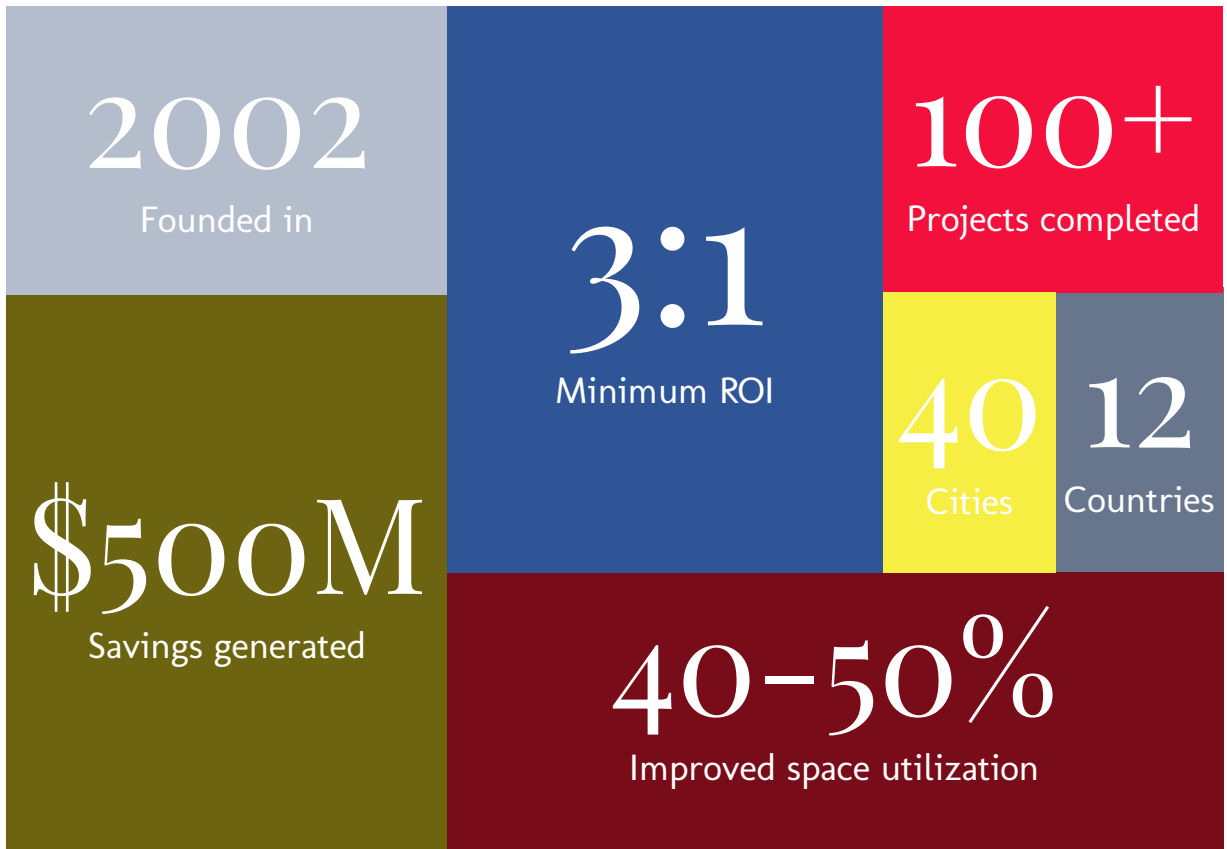
Reduced lease cost

**45%**  
Operating costs

Savings realized



# Kelmic at a Glance





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