

## Warehouse design Getting it right first time..

**By Stewart Arbuckle - Loc8**

Given the responsibility of designing a new facility or reworking an existing warehouse? Then welcome to the mine field of warehouse design.

The mind-map shown shows a high level summary of the main areas to be worked through to assist in making the ultimate warehouse where each of these areas can be studied in great depth, however, this high level summary helps in identifying a path through the operationally effective and efficient warehouse voyage.

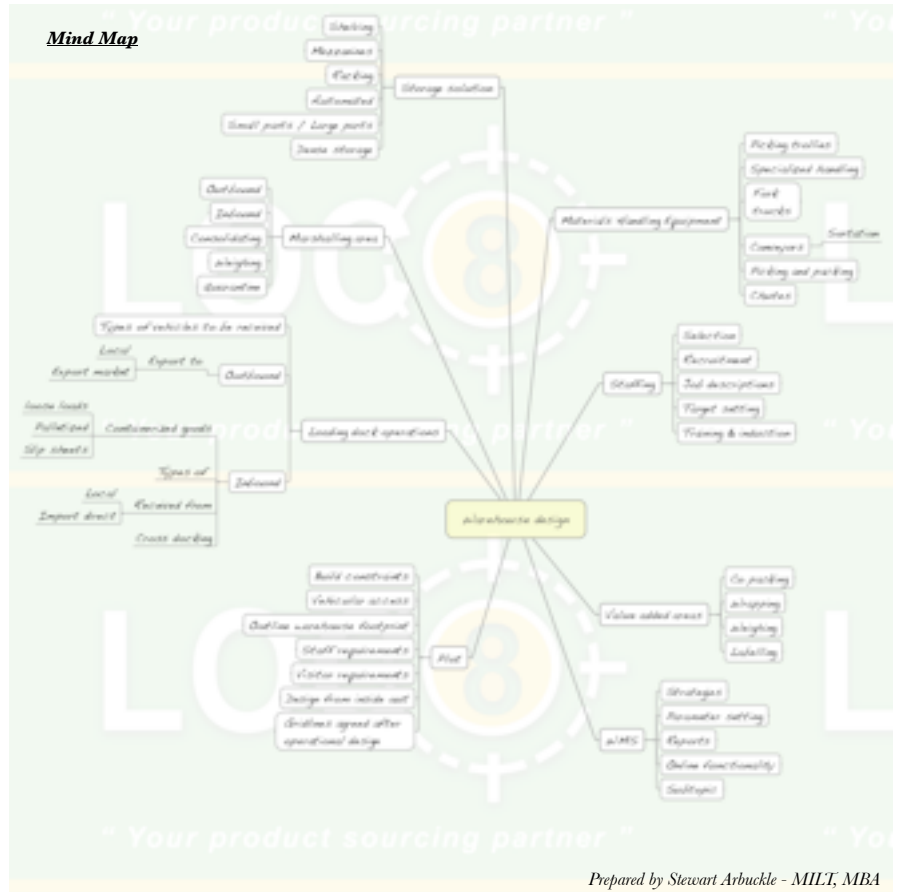
Each project is different, however, the overall objectives are to ensure you maximize the following criteria;

- ✓ Order cycle time
- ✓ Order accuracy
- ✓ Productivity
- ✓ Inventory control
- ✓ Optimal use of the cube
- ✓ Optimal flow of goods
- ✓ Good use of IT
- ✓ Cost benchmarks

So how do you achieve this? Not easily is the answer, however, by working through a road map (as shown) and making an extra effort to adopt a scenario planning approach you stand the best chance of creating a benchmark-able warehouse. Along this journey you will require constructive advice and should form a learning and open relationship with potential suppliers, advisors or partners as follows;

- Materials handling suppliers
- Racking & shelving suppliers
- Logistics consultants

By working closely with these partner companies you not only gain from their professional experience but you start the beginnings of an ongoing relationship



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throughout the project and post implementation.

### Storage solutions

Looking at perhaps the most fundamental section Storage Solutions from the mind-map, this is where the design process is crucial as any error made here can result in building a warehouse with inherent inefficiencies or an expensive build plan. All of these can have an impact on the organizations competitive position in the market place. Not just on price positioning but on being able to meet your clients deliverables. The worst single mistake at this stage is not to design a warehouse from the inside out which can result in the creation of a warehouse with structural columns placed in the wrong grid line intervals.

This is a major issue which results in a lot of operational compromise and less use of the cube. The simple solution is to enter this stage having profiled the products to be stored (known or potential) and work hard at designing a flexible solution that best stores them whilst making best use of the cube and harmonizing capacity with the storage and retrieval requirements to make sure you can meet or exceed the KPI expectations of your management and clients. This edge and confidence in your solution will quickly enhance your reputation in the market place and help in both winning and retaining valuable clients. Which in conclusion shows one advantage to be had by working with competent and experience companies who will share your aims and objectives to help you realize your vision.

### How to be creative? "optioneering.."

Not a word you will find in the dictionary, but perhaps it should be as the idea of creating lots of options is key in creative warehouse design. Many operators can have fixed views on the right solution or may have preferred ways of storing and handling products and this mind set can often become a constraint. This is where a good storage solutions provider can add significant value as they would critique any idea presented to them or provide

constructive thoughts and suggestions on new projects. In simple terms the "optioneering concept" works by simply generating many workable solutions to give owners an informed position from where they evaluate the pro's and con's of many what if scenarios for their new warehouse. This takes more time and resource up front and the generation of lots of Auto CAD designs, however, with the right partner company offering this support onboard you can be comfortable of the ownership of a warehouse that has been built upon very informed



#### Creating your shopping list..

Warehouse doors, dock levellers, racking, fast action doors, cooling fans, safety rails, signage, materials handling, mezzanine, shelving, packing stations, conveyors etc. then call Loc8 on 800-Loc8 (5628) for advice.