DAITUM

Advanced Warehouse Layout
Case Study: SA Power Networks

As the state's electricity distributor, SA Power Networks' role is to build, maintain and upgrade the poles, wires and substations that deliver power to around 1.7 million customers.

Case Scenario

Regional depots regularly place orders for parts used in maintenance that are fulfilled by SA Power Network's central warehouse in the state capital. Each order is comprised of multiple materials that need to be picked from locations across the sizeable warehouse before they are packaged and hauled to the depots by trucks.

Andrew Dilena, Logistics & Operations Manager explains, "One of the killers of our industry is travel time: the amount of time you're walking [to pick materials] and not working. So, the focus this year was on how to layout the warehouse better." He added, "By putting the materials that are regularly picked together into bins that are close to each other, we won't travel as much."

The Solution

With input from Mr Dilena and his team, Daitum was configured to recommend relocations of materials within the warehouse for optimal access: using historical demand, relocations are intelligently generated that result in frequently-picked materials being situated closer to the consolidation area. Furthermore, materials frequently picked as part of the same orders are clustered to further minimise the travel distance between them.

Daitum's SaaS solution captures all the relevant business rules and constraints and allows the user to easily influence how the relocations are generated. This includes a focus on primarily frequently picked materials, infrequently picked materials or a combination of the two.

Antony Muller, Salvage Officer, points out that "Daitum were able to build a system that meets our warehouse needs and they just understood how our business operates and incorporated all those business rules into the system."

SA Power Networks

Benefits

⬇ Time taken picking materials

⬇ 32% overhead access

⬇ 25% distance travelled

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Antony Muller
Salvage Officer

The Results

Relocating materials is a physically intensive task and Daitum is utilised whenever capacity exists to follow the software's recommendations. The benefits of the relocations are realised during the daily picking where the strategic placement of materials has a significant impact on the time taken to pick all materials.

An additional benefit of Daitum's solution is a reduction in the number of times pick faced need to be replenished from overhead storage, a very time-consuming task, as frequently picked materials are moved to larger pick faces, if possible.

Daitum has also been configured to optimally group the day's orders to minimise the distance travelled when picking all materials associated with these orders. This resulted in a reduction in travel distance by up to 25 percent, which is expected to improve further as the layout of the warehouse is adjusted over time.

25%	**32%**	**10x**
Decrease in Travel time	Increased in overhead access	Faster review process

Why Daitum

At Daitum, we understand that making good operational decisions is hard. And none are harder than rostering.

With Daitum Rostering you will spend less time rostering plus deliver a roster that better meets your organisation's needs.

Accessible
No specialist skills required

Familiar
Simple, easy to use interface

Universal
Any problem Any industry

Scalable
Cloud based Elastic computing

Optimal
Algorithms learn from experience

Efficient
ROI measured in weeks not years