

Case Study

Universal.

Plan for growth and change in movie and music distribution.



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Distribution of movies and music is a fast-paced, ever changing business in which suppliers must react quickly. To cater for expected changes in demand, Universal and Dexion factored a mezzanine extension into planning for a new distribution centre in the Sydney suburb of Kingsgrove.

The new centre has only been operating since September 2003, but the mezzanine extension was finished and operating at the beginning of September 2004, in time for the pre-Christmas rush.

Heavy duty uprights, capable of supporting the mezzanine, were incorporated into the structure of the new building. Commenting on the instant upgrade, Paul Green, National Distribution Manager of Universal, said: “Dexion has been Universal’s partner in distribution and warehousing for over 15 years so we’ve come to expect innovative solutions to the storage issues we present.

“Apart from a few settling in issues, the installation was problem free. The team was very professional and interruptions to

our daily work schedules were kept to a minimum” Paul Green said.

The mezzanine added 1,400 square metres, or a third, to the 4,500 square metre floor space of the warehouse. This represents an 85% increase in picking capacity as it is devoted exclusively to picking and is directly above the existing picking area. Cartons travel automatically between the two levels on a conveying system installed by Dexion Integrated Systems.

Prior to the extension, Dexion had designed and installed the initial storage solution which included the bulk storage area of 1662 full pallet positions, 505 half pallet positions, 500 small bulk locations to fill bin picks and slower selling items and 2500 carton live storage locations.

The Kingsgrove warehouse manages 8,000 SKUs and handles 700,000 cartons in 575,000 consignments each year. It has three main sectors. Best selling lines are in the “power-pick” area where a full pallet of the one product is placed in its slot and picks are straight off the pallet.



Second best selling lines are in the carton-live storage area, refilled quickly by the replenishment system. The third area has around 4,500 bin picks for the back order catalogue.

Paul Green said the new distribution centre was planned around fast response because, retail stores and video hire/retail businesses no longer hold stocks. “They buy six, sell three, and then order another six. They don’t gamble on the success of a product and have no back-room for stock. It is held in our warehouse and sent out on demand.

“They order Monday and we need to have the carton on the way the same day because they expect to get it Tuesday or Wednesday, right around Australia,” he said.

Universal distributes 23 million units a year to 6,500 retail outlets, which include around 2,000 audio retailers and 4,500 DVD/video retailers and rental outlets such as Video Ezy and Blockbuster. Sanity is the biggest audio customer and Universal supplies all the major retailers including David Jones, Myers, Coles, Target, Woolworths and Big W.

Universal decided on a Dexion Integrated Systems, Pick to Light (PTL) system. “We examined other systems but decided PTL would give us the greatest speed and accuracy,” Paul Green said.

Before the move to Kingsgrove, parcels were assembled from paper manifests. This was slow and cumbersome and did not align with over 70% of orders being received by EDI from the major clients that make up 60% of demand.

To optimise throughput and manpower, an operator decides which orders should be released based on the picking activity and to avoid releasing orders to zones that are already full. Once an order is released, an optimum size carton is produced by an automatic carton erector, a two person job in the old facility, and a label is applied and validated.

The picker scans the label and a light goes on at the location of the required product. The product is picked, the light cancelled and the product put into the carton. This system is easy to learn and use.



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A core group of 40 permanents operates one packing shift during most of the year but a second shift is commenced, and casuals hired, in peak periods like the run up to Christmas.

Filled cartons automatically find the nearest available invoice printer to decrease congestion and speed up orders. A prompt tells pickers whether the invoice should go in or on the carton. Automatic invoice printing saves about 45 seconds on each order, a huge amount on 575,000 consignments!

Universal is working with major customers to eliminate invoices and replace them with electronic transfer of this information. An automatic weight checker rejects cartons that are not within the tolerance of the order so they can be redirected to a quality control area for checking and correction.

“Once an order is completed, we can EDI the customer with supply information, price and final invoice cost. When the order is received customers don't have to look for the invoice or contents. A simple

scan puts the information before their eyes,” Paul Green said.

The Pick to Light System has 17,650 locations and nearly 3,000 lights. Receipt, put-away and replenishment is controlled by RF and all movements are validated by bar code checking. Dexion worked with Universal to enhance the Cordis management system that is used by Universal throughout the world.

According to Paul Green, the principal advantage of the new warehouse is the flexibility to meet the changing needs. “Two years ago, CDs were our fastest moving product and 75% of the video business was VHS. Now it is 60% DVD and only 40% VHS. Next year DVD could go as high as 90%.

“We also have the challenge of dealing with mega-releases while maintaining normal output. For Christmas, we are releasing Shrek 2, Australia's second largest ever grossing theatre movie. This will involve processing 800 pallets of DVDs and videos into 1.5 million despatches over just two weeks!” Paul Green said.

