

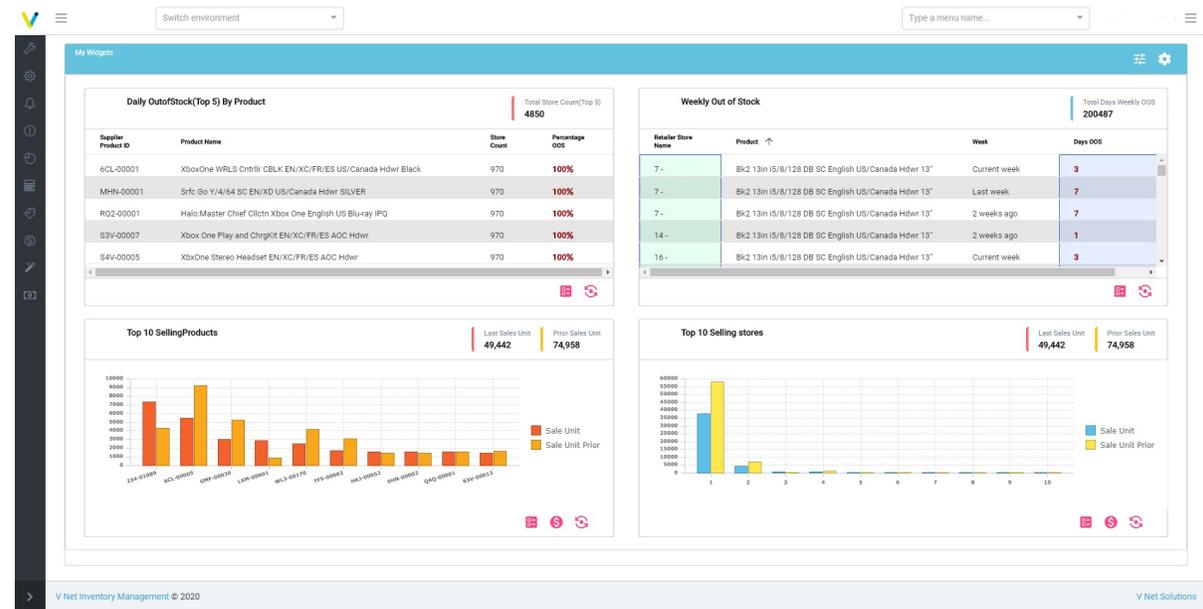
V Net Solutions

V Net Inventory

www.vnetsolutions.com.au



Gold
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Consumer Electronics: Optimized stock availability rates of high value, short lifecycle, long lead time products.....

Replenishment and Demand plans for products with average sell price > \$500, up to 9-month production lead times and product lifecycles < 12 months.

V Net utilizes consumer demand data and Microsoft Azure driven AI/ML models to calculate short and long-term future demand, delivering 95% shelf availability with minimal redundant stock.



CHALLENGES

The consumer electronics industry is a dynamic, unpredictable and ever-changing product segment with most products of very high value. The biggest challenge for the industry is ensuring an optimized customer service level without being left with obsolete stock for old models.

JB Hi Fi and their trading partners including Microsoft, Sony, Logitech and Hisense have embraced the V Net solution, the outcome being a significant increase in stock availability and reduction in obsolete stock.

IDEAL SOLUTION

The V Net platform utilizes the MS Azure Intelligent Cloud to run AI/ML forecasting models that provide best in class consumer demand replenishment orders and demand plans. These inventory processes are executed in an environment that must cater for the unpredictable and dynamic nature of the consumer electronics industry. The replenishment, allocation and demand plans are provided considering the nuances of each of the product categories within this evolving industry.

DESIRED OUTCOMES

The V Net solution has provided both retailers and their trading partners with an operationally efficient platform for managing the inventory within the supply chain.

The consumer electronics industry has experienced a significant increase in retail sales through improvements in stock availability, whilst maintaining or reducing inventory levels. The joint investment in mark-down exposure has also been reduced through a meaningful decrease in redundant stock.



V Net Solutions

V Net Inventory

V Net utilizes the Azure Intelligent Cloud to provide a rigid and scalable inventory management platform, applying the latest AI models, transforming it into a customized solution, solving the specific inventory management challenges of your business.

OPTIMIZED INVENTORY

A “fit for purpose” toolkit that transforms your legacy inventory platform into a customized solution catering for the specific nuances of your product segments.

Data driven planning and replenishment functions that allow you to control strategic forecasts and tactical orders during ever-changing real-world constraints.

ACTIONABLE INSIGHTS

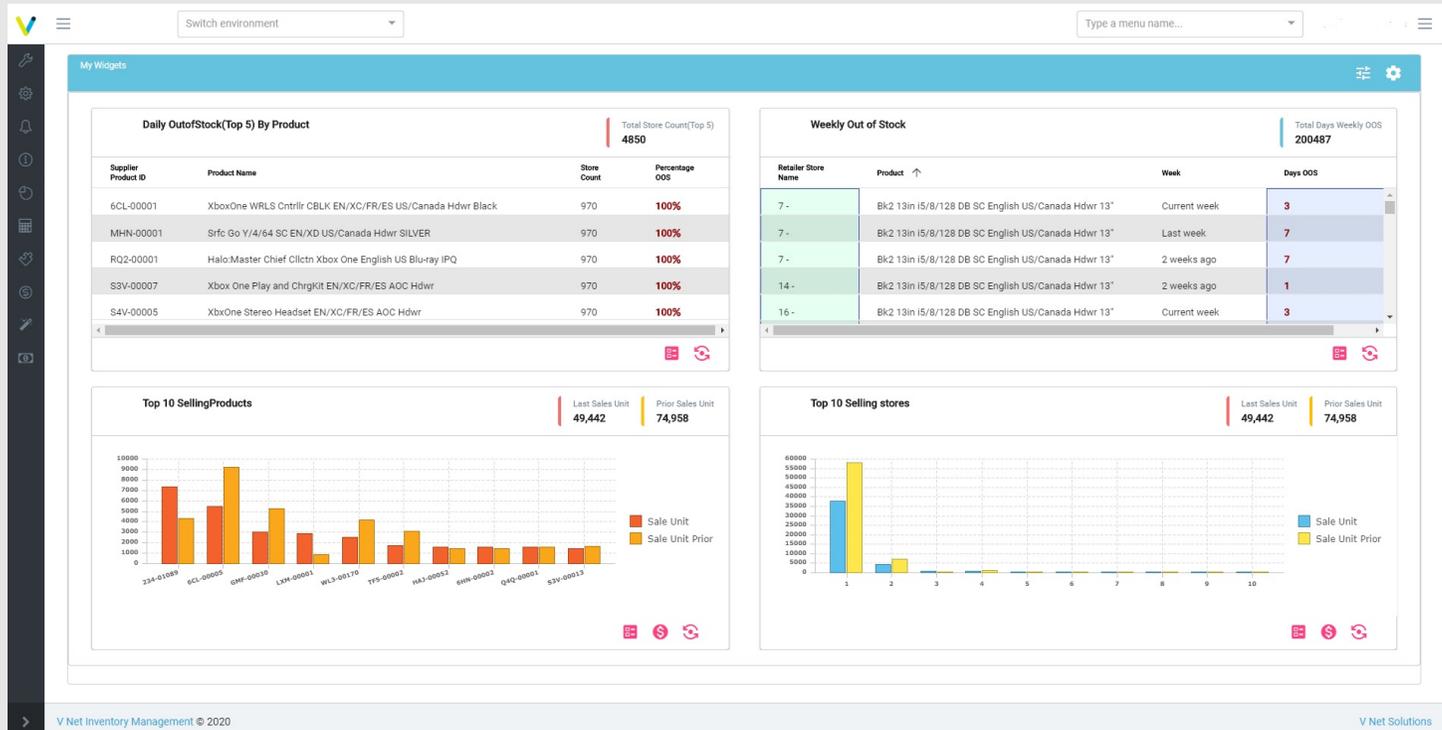
Transform raw data from multiple sources into actionable insights that allow for on the spot, fact-based decision making. Agile business decisions based on impact analysis. Executives need access to what they don't see today, plan for what they don't know tomorrow, and execute to align for success. The V Net Insights platform visualizes data to discover, interpret, and act on real-time from the entire digital ecosystem, including third-party data sources.

INTELLIGENT V NET CLOUD

The V Net Inventory solution leverages MS Azure’s power and processing capabilities, coupled with specific Azure services to provide best in class AI/ML forecasting models. Azure’s scalability allows V Net to assign individual AI models at a store and sku level based on best fit run tests. This atomic level forecasting capability places V Net at the forefront of consumer demand forecasting for any product segment.

V Net and Microsoft Azure

V Net partnered with Microsoft Azure in 2019 to transform our legacy solution into a state of the art, leading edge inventory and analytics platform. The V Net applications provide our client base with the best in class replenishment and demand planning outcomes, leveraging on the power and scalability of the Azure service model to ensure our complex AI/ML processes are delivered to meet the mission critical demands of our clients.



V NET DATA AGGREGATOR

The V Net Data Aggregator leverages the flexibility of Azure Logic Apps B2B services to control the flow of in and outbound data, enabling simple control and logging for transfer events with customers. Processing is handled by custom-built applications running on Azure VM providing exceptional availability and performance.

V NET INVENTORY

Within our V Net Inventory platform we expand on our data aggregation toolset, introducing Azure Kubernetes, to enable large-scale, high performance computing across our AI/ML forecasting layer. Our client base expect the best in class AI models, that are assigned at a store/sku level, with no compromise on the deliver times of our replenishment and demand plans.

V NET INSIGHTS

The V Net Insights platform takes advantage of Azure Synapse, a variant of Azure SQL that supports massively parallel data operations, which coupled with Azure Analysis services tabular models, allows for complex calculations and aggregations to be swiftly updated with the latest data. These calculations are then presented back to end users via Power BI, which is used to deliver custom-designed reports and dashboards, to highlight KPIs or other important data to end users.

JB Hi Fi Leverage V Net to Optimize Inventory Position



“In October 2019, the implementation of the V Net Inventory module across all JB Hi Fi categories was complete. We traded through the Christmas period with improved operational efficiencies in managing our stock flow through this high-volume trading period. The introduction of V Net across our entire suite of product categories contributed significantly to JB Hi Fi improving product availability for customers during this key trading period”

Cameron Trainor - Managing Director JB HI FI Australia

Integrate Replenishment Plan with Demand Forecast

Challenge

Unsatisfactory stock availability rates at retail due to poor fulfilment rates from the vendors.

Solution

A CPFR process providing vendors with a 13-week demand plan by sku, with orders locked in the first 4 weeks as committed. Utilizing the V Net Inventory platform we run the replenishment plans to the week 1 commitment. The outcome being a 15%+ improvement in stock availability due to the 25%+ improvement in vendor fulfilment rates.

New Product Launch

Challenge

Inaccurate new line launch forecast at store level.

Solution

Utilize current consumer demand historic data for “like” skus to create store level demand curves for new line launch allocation orders. Leverage V Net’s “critical” sku replenishment function to identify any potential out of stocks daily. The outcome being a 25%+ improvement in sell through rates with the stores being left with minimum redundant inventory.

Disparate Rate of Sale Across SKU’s

Challenge

Inaccurate sku forecast at store level due to the disparate mix in rate of sale.

Solution

Leverage MS Azure scalability and intelligence to run AI/ML demand forecast models at a store/sku level, applying the best of 12 models to each store/sku combination. The outcome being a significant spike in forecast accuracy due to applying different forecast models to skus based on the sales patterns at store level.

JB Hi Fi Leverage V Net to Optimize Analytics Capabilities



“The V Net Insights platform has facilitated the creation of a single analytical platform for our buying, operations and finance departments. Our analytics capabilities allow us to navigate the performance of our business in a very agile and time efficient manner. The V Net Insights solution also presented an opportunity to share data with our strategic trading partners, ensuring we are collaborating with a data set focused on measuring the success of our strategies and identifying opportunities to improve our joint initiatives. “

Cameron Trainor - Managing Director JB HI FI Australia

Disparate Data Consolidated in a Single Model

Challenge

Multiple sources of data being manipulated via Excel by analysts.

Solution

V Net Insights consolidated multiple data sources into one Azure based tabular model, utilizing MS Azure BI services and Power BI visualization to provide dashboards to replace the disparate Excel reports. Outcome being significant productivity improvements due to execs accessing data on a timelier basis, and analysts focusing on identifying missed opportunities as opposed to manipulating data.

Insights Presented on Time

Challenge

The buying team needed the insights delivered by 6am daily.

Solution

The JB HI FI POS polling process completed at 3am every morning. The data required for the V Net Insights module would be delivered at 430am. V Net leveraged the power and scale of the MS Azure platform to run the load, validate and aggregation processes to be completed daily within 90 min. This provided the JB HI FI team with updated insights by 6am daily.

A Collaboration Platform

Challenge

Vendors presenting insights to retailer from different source to the retailer

Solution

JB HI FI created a collaboration platform using V Net Insights. The platform was a set of dashboards shared via a portal with their strategic partners. The insights from the collaboration environment focused on insights to measure the KPI's of their joint initiative's and provided a vehicle for both parties to identify any missed opportunities.

Arrotex Pharmaceuticals Transforming the Industry with V Net



“In order to improve our service level to the consumer, the pharmaceutical industry must transform its supply chain. Arrotex envisage V Net as integral in helping facilitate this transformational change. Phase 1 of the program was to introduce V Net’s automated replenishment platform for dispensary and over the counter drugs. The results have seen an operational shift from the pharmacist monitoring stock levels, shifting focus on servicing the customer.

Dennis Bastas, Chairman and CEO Arrotex

Integrate Replenishment Plan with Demand Forecast

Challenge

Pharmacist spending disproportionate amount of their time monitoring and ordering dispensary stock.

Solution

Arrotex introduced the V Net automated inventory program which provided the pharmacies with an order of the generic medications on a fortnightly basis. This allowed the pharmacists to spend less time monitoring and ordering dispensary stock and more time providing advice and serving their customers.

An Inefficient Supply Chain

Challenge

Increasing transportation and warehouse labor costs.

Solution

The pharmacist would order dispensary items on a needs by basis. This led to multiple store orders and delivers to each pharmacy on a weekly basis. The introduction of a fortnightly dispensary order from the V Net inventory platform created operational efficiencies in the warehouse and reduced transportation costs.

Changes in Demand Due to Seasonality

Challenge

Pharmacist not increasing stock weight of certain drugs due to weather pattern or traffic changes.

Solution

The demand for certain drugs changes with seasons. E.g. Allergy drugs demand increase in spring. Also, holiday destination stores demand increase during holiday season. The introduction of the V Net automated replenishment platform takes both seasonal and store data into account.

Optimizing your Inventory and Analytics challenges leveraging the Intelligent Azure platform

Get a free trial: www.vnetsolutions.com.au/request-a-demo/

Call for more information: +61 411 276 896

Ask a question via email: info@vnetsolutions.com.au

Learn more: www.vnetsolutions.com.au/v-inventory/



YOUR PARTNER IN EFFECTIVE
RETAIL INVENTORY MANAGEMENT

The diagram illustrates a retail inventory management process. It starts with a 'DISTRIBUTION CENTRE' on the left, represented by a stylized building icon. A line with a white dot at the end leads to a 'v' icon, which then leads to a 'RETAIL NETWORK' on the right, represented by a stylized building icon. Below the 'DISTRIBUTION CENTRE' icon are the words 'DISTRIBUTION CENTRE' and '>>>'. Below the 'RETAIL NETWORK' icon are the words '<<<' and 'RETAIL NETWORK'. The entire diagram is set against a dark blue background.

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A line graph with a dark blue background. It features two main lines: a blue line and a yellow line. Both lines have white circular markers at various points. The blue line starts high, dips, then rises and stays high. The yellow line starts lower, dips, then rises and stays high. There are also some grey lines in the background.