

# Planning, Allocation, Demand Forecasting.

How today do retailers measure ROI  
from a new system implementation?

By Columbus Consulting International  
in collaboration with Island Pacific



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# Executive summary

## How do retailers measure Return on Investment (ROI) from new systems implementations?

Technology is transforming every aspect of the retail business, often at a dizzying rate. Innovations that felt daunting at first quickly become part of normal life. It hardly feels like 20-30 years ago when the first planning systems appeared.

## THE EVOLUTION OF PLANNING



### INFRASTRUCTURE

- POS data collection
- PO Management



### CATEGORY PLANNING

- MFP, Open to Buy
- Replenishment
- Data Warehouse



### ASSORTMENT PLANNING

- Micro-Merchandising
- Consumer Centric Planning
- Size & Prepack



### OPTIMIZATION

- Omni-Channel Transformation
- Reset of Retail Rules
- Analytics
- Process Automation

### 'OPERATIONAL'

Even with this technology revolution, many retailers still use Excel for all their planning and even with business critical procedures such as allocation, spreadsheets are still common. Most retailers have an inherited systems/solutions landscape that has evolved over time with many solutions that are not fully integrated and are in "legacy" mode creating a difficult environment for both IT and the users.

The heart of any retailer is the buying and planning divisions, which plans, buys and distributes merchandise throughout the system and into channels/stores. Without doubt, **the most important part of the entire life-support system is the lifeblood, or inventory. If a retailer does not have the right merchandise at the right price, in the right place, at the right time and in the right quantities, it will very quickly become irrelevant.** In addition, if the inventory is not in line with the retailer's point of view and not purchased in line with planned sales, the business will become bloated.

As most CEO's would say, no one ever went into CVA or Chapter 11 being under-stocked. They are always over-stocked, mostly with the wrong product.

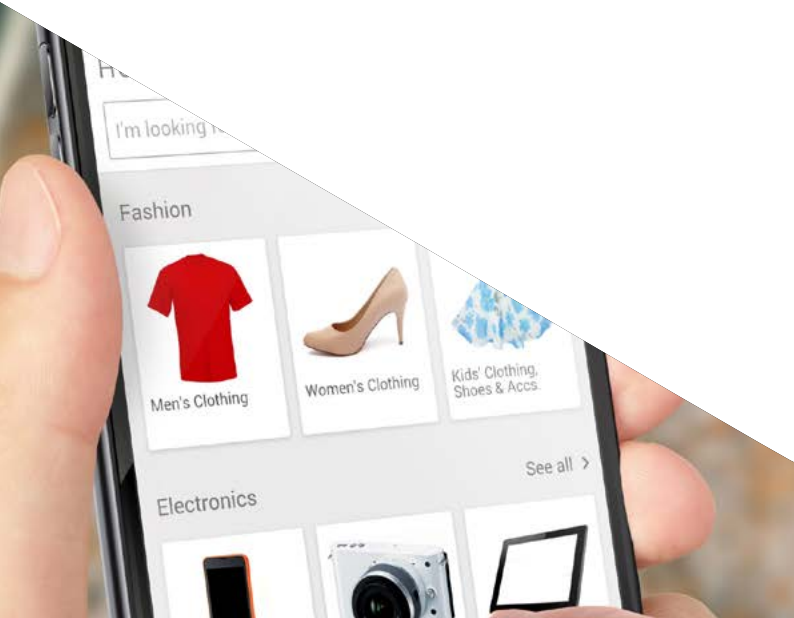
**Tight inventory management is the driving force behind generating revenue and profit** because sitting on un-saleable inventory ties up cash. If inventory is not carefully controlled, a retailer will spiral out of control and into irrelevance very quickly.

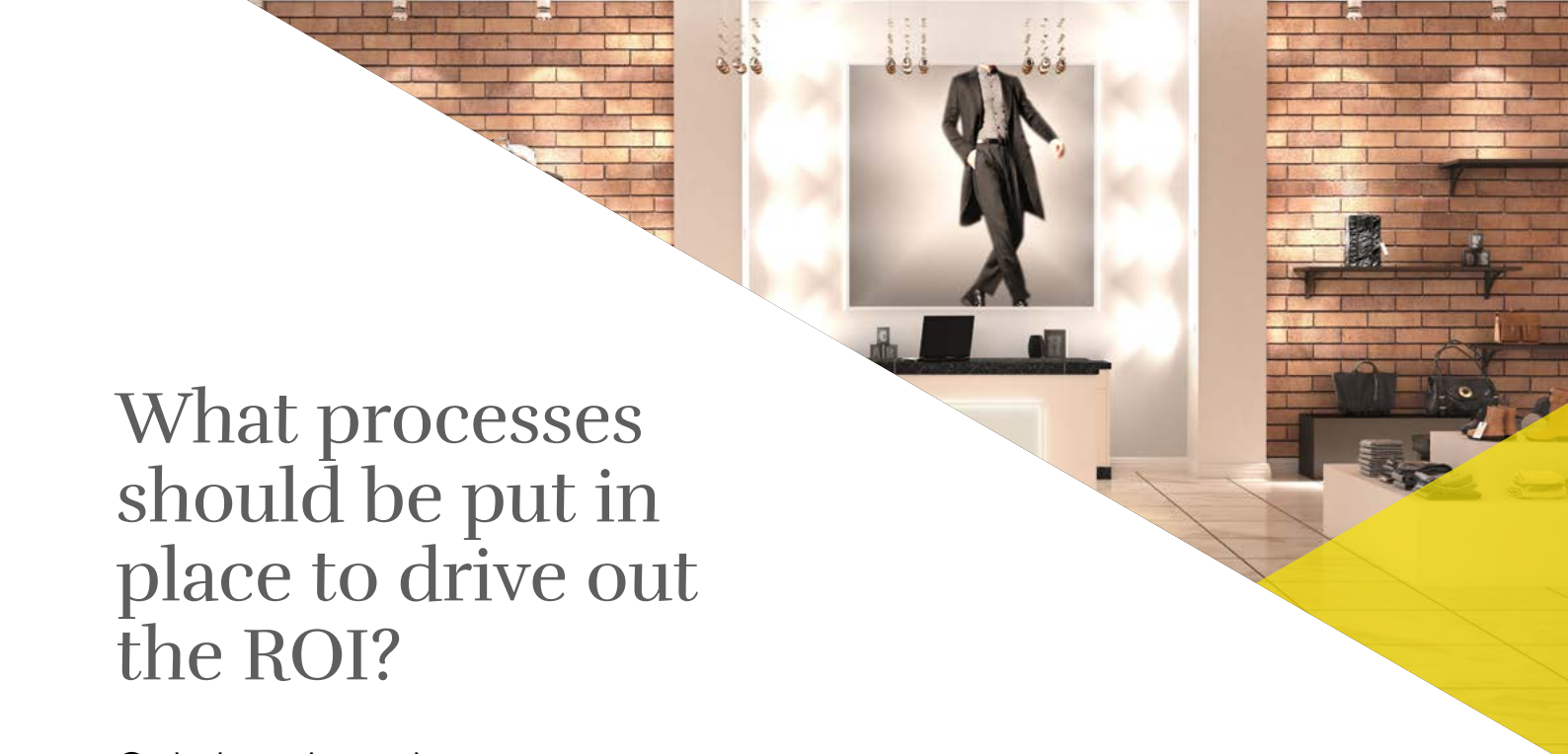
Modern technology has contributed greatly to the efficiencies of merchandising, and the information to which retailers have access improves all the time. Therefore, many retailers have invested in planning, allocation and demand forecasting systems but have they delivered the ROI? How can it be measured?

### 'ANALYTICAL'

# Key insights

1. What processes should be put in place to drive out the ROI?
2. What are the main benefits these systems deliver?
3. Who can best drive these benefits?
4. What KPI's should be set?
5. How can the ROI be measured?





# What processes should be put in place to drive out the ROI?

## Get closer to customers

To improve knowledge of your customers, work like cultural anthropologists. For example, a department-store retailer might require 20- and 30-something merchants, buyers, planners, and designers to spend time face-to-face with female customers older than 40. Buyers and designers might also spend time meeting directly with important ethnic groups who are unfamiliar to them. Find out what these customers like and don't like about shopping. Uncover their desires and frustrations. Social media is a great tool to use to understand your customers' sentiments and requirements.

Be careful not to generalise about the behaviour of your customers. Cross-channel shopping behaviour tends to vary by merchandise category, even for the same customer.

Survey research shows that most retail customers expect a handful of straightforward things:

- They want fair and consistent pricing across all sales channels for the same brand
- They want an interesting shopping experience. A growing number of customers want to control, customize, co-produce, or co-create their shopping experience
- The huge millennial generation, whose economic power is growing fast, wants a personalized relationship with the brands they buy
- Once customers have made a purchase decision, they want their merchandise fast. They want efficient checkout, with same-day or overnight delivery at no charge

- They want consistent service, regardless of the channel through which they buy. In particular, they want to be able to return merchandise across channels. If they buy something online, they want to be able to return it to a store
- They want convenience. They want to save time and effort.

One individual or group in your company should be responsible for managing the relationship with your customers across all channels—and possibly across multiple brands.

## Get out of the office

In situations of uncertainty, you won't find answers or solutions within your four walls. Nor are you likely to get the information you need by interviewing people by phone. You have to get out and meet your customers where they live and shop. Talk to people on the front lines. Visit directly with store associates, not just regional managers.

## Build diverse teams

To improve efficiency or to scale operations fast, you'll probably achieve best results with a team of specialists and experts. But to find new and innovative solutions, you'll do better with a highly diverse team of people who don't necessarily know much about established ways to address the challenges you face.

To increase innovation, cross-pollinate. Hire people with varied backgrounds and different cultural perspectives.



Bring in people from outside your industry. Study how organizations other than retailers have solved related problems. Get dissimilar people working together. Establish small, cross-functional ad hoc teams.

## Frictionless retailing

It's prudent to try to minimize disruption to your organisation. Changes to organisation charts tend to be traumatic for both individuals and companies. Few people welcome such changes, and many employees try to resist or undermine them. **Many talk about "frictionless retailing"** this is also very true within your organisation to try to create less friction across teams when implementing multi-channel strategies.

You must be prepared to embrace substantial changes to your organisation structure. And you must be bold and decisive in making the changes you need. Even if you put all the right business processes, systems, and people in place—but you don't change your organisation—the old structure may still thwart your success. If your organisation chart works against you, your other efforts may not deliver the results you want. Your achievement of quick wins will create positive momentum for you to tackle more difficult challenges later.

So, despite the risks and challenges you may face in changing your organisation, don't ignore the need to do so.

## Make multi-channel inventory seamless

Not only are organisational structures disjointed across channels, due to the growth in your different channels; systems and technology can also be disjointed. E.g. inventory management across the channels can be executed in different systems and so there is not a holistic view of inventory. It's key to have a central view of customer and inventory.

## Agility is Key

The current pace of social, economic, technical, and environmental change appears likely to continue or accelerate nearly everywhere in the world. If adaptation is key to survival, retailers must strive to be ever more agile. But adaptation in response to change is defensive and reactive.

The real opportunity for retailers of all sizes is to grow by leading innovation and causing disruption.

This option is available even to the smallest of retailers, provided they have the right mindset and the know-how to do it. By leading innovation and creating their own forms of disruption, two formerly small retailers have become giants of the global retail industry.

Both Walmart and Amazon came out of nowhere, as all new companies do. Within the short span of a few decades, these highly disruptive companies turned the entire global retail industry on its head. Today they continue to disrupt each other, and other retailers scramble to adapt.

In the 1970s and '80s, futurists Alvin Toffler, John Naisbitt and others warned business leaders to anticipate a future that brings change at an accelerating pace. Although their predictions were often right, futurists missed some of the most consequential changes of all—including the fast growth and global influence of the Internet.

The recent past is often our best indicator of things soon to come. But current trends often mislead us about the future. Considering how hard it is to predict the future, agility offers a more reliable way to mitigate disruption. Better still, agility enables retailers to profit by initiating disruptions of their own design.

If process changes and technology are linked together in a much more agile way, users can be much more flexible in their trading decisions to ensure that they are driving out the most profit for each category. Planning, allocation and forecasting tools provide structure and stability to deliver this more agile approach.

Agility and responsiveness are directly tied to profitability. The goal is to change the status quo whether that be to add the right inventory or move inventory that's not performing. When you identify product that is trending well, the ultimate goal is to push your vendors to respond quickly to your replenishment needs. When product is moving slowly, often retailers resort to markdowns as the default mechanism for moving merchandise, but the end result can be poor margin. It's important to consider the inventory data and evaluate all the different ways to handle under-performing inventory.

# How can predictive analytics be used practically?

Predictive analytics is a step up from more traditional forms of statistical business intelligence, which are about looking at the past or the present. Predictive analytics uses past data for the purpose of predicting future events. **Its focus is on the micro rather than the macro**, looking at individual interactions with customers, suppliers, employees, etc., rather than at average behaviour or at high-level aggregate patterns. Looking to the future based on past behaviour to predict: Will a particular customer engage or churn? Or will a particular supplier deliver on time?

## The challenge

In our technology driven, data intensive, world most retail businesses have a grip on data generation and collection. But they do not necessarily know how best to leverage this data to drive business growth.

The days of having a fully stocked inventory all the time are quickly fading. Having too much of an item that isn't selling, or not enough of a popular product can be equally damaging to your bottom line. However, most companies still use the same standard method of basing future orders on historic patterns. This isn't always a problem but can prove challenging when you're left holding a container of products you can't move without taking a loss.

Using predictive analytics grants you a path to both reduce expenses on inventory and ensure that the stock you're buying converts into sales instead of sunk costs. Retailers who deploy analytics can focus their efforts to highlight areas of high demand, quickly pick up on emerging sales trends, and optimise delivery to ensure the right inventory goes to the correct store. Predictive analytics can help you stay ahead of customer preferences, streamline your supply chain management and reduce your inventory expenditures while helping expand margins.





# What are the main benefits these systems deliver?

As discussed briefly above, there are many benefits that new systems can deliver. Some are hard financial benefits and others are softer benefits.

Many retailers talk about the following benefits and you can find many case studies on vendor websites that back these up.

- **Increasing the planning and forecasting time cycles** – with better systems, users can create say quarterly budgets compared to say half year without a system. Users can also increase the rate of forecasting cycles say to month or from month to week
- **Increased full price sales** – right product, right place, right time
- **Accurate inventory** – Improvement in forecast accuracy will have an immediate effect on another process area that requires close measurement — inventory management. The measurement for this area is a reduction of inventory buffers at all points in the supply chain, which in turn shrinks the costs associated with inventory carry and write-offs. By closely measuring inventory performance, retailers can gain the ability to control critical resource allocation per division and product lead times.
- **Increased forecast accuracy** creating more accurate inbound inventory planning
- **Increased product availability**
- **Reduction in markdowns**
- **Lower operating costs**
- **Support growth strategy**
- **React quicker to get in and out of stock**
- **Increased efficiency in time** spent during market on pre-planning decisions rather than product selection
- **Lower expedited freight charges** due to more accurate planning
- **Accurate factory capacity planning** – therefore better vendor and supply chain relationships
- **Reduction in critical path** and increased speed to market
- **A reduction of inventory buffers** at all points in the supply chain, which in turn shrinks the costs associated with inventory carry and write-offs. By closely measuring inventory performance, you will gain the ability to control critical resource allocation per division and product lead times.
- **Increased customer satisfaction** through better service levels



# Who can best drive these benefits?

## New culture and ways of working

Adopting the new B&M technology-driven operating model leads to an enhanced culture and ways of working, which require new skills, capabilities, organisation and tools.

These include changes such as the standardisation of processes across category teams, a more customer-focused planning and forecasting approach and quicker reactions to trends via predictive analytics. Ultimately, a more collaborative mind-set is needed when implementing this operating model.

## Role and capability changes

Teams become more engaged as repetitive, administrative tasks are reduced through automation, and data from new sources is available. Merchandisers change from “data manipulators” to “analytics and insights experts”; buyers evolve from “supplier managers” to “new product developers”.

## Organisation structure development

New skills and capabilities are needed across the business, especially for data quality and governance.

## New tools and techniques

New forecasting/analytics applications require new techniques, eventually facilitating self-service analytics. It is critical that any system implementation has clear goals and strategies communicated to everyone involved. Job descriptions and key competencies may be to be amended. Clear RACI's communicated and new ways or working across teams to be established.

For example, new planning, allocation and forecasting tools may have resulted in buying and merchandising teams being consolidated across channels rather than in silos. Therefore, there needs to be clear KPIs, roles etc. defined and delivered to ensure that the right processes and completed by the right individuals.

Leading retailers are automating reporting for key meetings (e.g. weekly trading meetings, range selection meetings) using new generation data visualisation tools, which enable B&M professionals to become analytics and insights experts, without input from data scientists. This also means they can work much more collaboratively as they are all working off the same data.



# What KPI's should be set?

With any change, business engagement and understanding are critical. Start and end with the users, and involve them at all stages of design to ensure adoption. Conducting research is important to build an understanding of needs, pain points and aspirations, while making sure that stakeholders are fully committed and engaged.

To ensure these new system implementations are in line with business benefit priorities, capture KPIs and benchmarks against peers and industry leaders, and model potential benefits of adopting an analytics-driven approach.

If you are a multi-channel retailer, ensure these are set across all your channels to drive the desired behaviour and not create internal competition or friction. The main KPI's that are captured and benchmarked are:

- **Price with Intake Margin** – in this non-loyal world, driving up intake margin to deliver profit can be a suicidal strategy. Retailers need to benchmark themselves against competitors to set this key metric. The emphasis should also be on pricing with margin targets determining affordable cost. Buying skill then becomes the driver
- **Full Prices Sell-through** – defined as a percentage that compares the amount of inventory a retailer receives against what is actually sold within a specific time period, sell-through helps assess if your investment is performing well. Depending upon the time period, a low sell-through percentage, say less than 10% per month, might indicate that your price is too high or you overbought and need to take an action to move the merchandise; a higher percentage of 90% can highlight a hot trend, a price that's too low, or that you were too conservative in your buying
- **Stock Turn** – as long as stock is turning, you have cash flow. Stock that sits on your shelf for too long ties up your cash. It also increases cost and bores your customers. Stock that moves quickly off your shelf lets you bring in more, freeing up cash and enticing customers to keep coming back. Stock Turn rates vary depending on the type of store you are operating. Large discount retailers' turnover inventory at a rate of 7 to 8.75 times a year whereas luxury retailers might turn inventory only 1.5 times a year. Seasonal retailers, such as apparel and shoes, should aim for a turn rate of once per season (four times a year).
- **Levels of promotion** – to promote or not promote? This is a topic in itself, but consumers have become "offer junkies" and it important for retailers to set these levels according to their brand identity. Do you partake in Black Friday or not for example? Retailers have to be careful not to buy promotion stock unless you are a promotion driven retailer. Is it better to sell out or have clearance stock?
- **Markdown costs** – Setting clear markdown KPI's for each team will drive behaviour and achieved margin targets
- **Availability** – Correcting availability problems begins by better understanding their root causes. While it may sound surprising, few retailers have a good grasp of where, when, and why out-of-stocks occur. A very high availability level can drive very high inventory levels although daily deliveries combined with controlled central stock can have high availability without high inventory
- **Forecast accuracy** – It is an important tool for root cause analysis and for detecting systematic changes in forecast accuracy Successful retailers would strongly recommend organisations to primarily focus on the KPI's that are directly linked to the goals of the business, and detailed above concerning profitability and efficiency, and go back to analysing forecast accuracy Forecasts will always be wrong. Knowing the likely deviation that is vital when it is identified as a potential root cause of unsatisfactory results.

# How can the ROI be measured?

The main reason many software implementations fail to deliver adequate return on investment is because they are categorised as software, rather than business improvement projects. Your methods for allocating resources lie at the heart of your operations so it's vital that your new systems are viewed as an enabler of business processes that deliver strategic value. The most obvious and quantifiable benefits of any software implementation can still be difficult to explain to senior leaders and decision makers. If you're looking to get a new planning, allocation or forecasting system off the ground or you'd like to showcase the benefits of an already established retailer, here are some of the measurable benefits – as well as some steps in how to measure them:

## Improved customer experience and service

Today, more than ever, your customers and their complete experience with your business should be the focus of all of your business activities in order to stay competitive. This means you can't rely solely on having a great product while ignoring the experience your customer has in finding, buying and receiving it. Your customers now have more choices available than ever, so it is essential to provide them with what they want, when they want it. That depends on high levels of customer service built in to item discovery, ordering (unified commerce) billing, shipping, repairs and returns.

By tracking measures such as online experience, line item fill rates, order fill rates, on-time deliveries and invoice accuracy, you gain a clearer picture of customer experience and service performance. You'll also be able to compare these measures to historical results in order to identify trends and potential problems in your customer service experience before they happen.

The other area that is often difficult to measure, but that can provide a substantial ROI, is improvement in customer satisfaction. Net Promoter Score (NPS) can be used before and after the experience of new technology has been deployed.

## Improved inventory management

For any business, having the right inventory in the right location to meet customer or production demand is the bare minimum ticket to the game. Any business can avoid stock outs by having excess inventory available, but this excess requires space and ties up capital which could be better used elsewhere. By monitoring the number of days' supply for each inventory item, and comparing it to forecasted demand; you can ensure inventory is available as needed, without excess.

Downstream finished goods inventory reduction from forecast accuracy improvement alone would include a one-time savings from the decrease in inventory, as well as a recurring savings of the carrying cost of the reduced inventory. Estimates range depending on your type of business.

- In a pure make-to-stock or distribution company the downstream inventory reduction could range from 10% to 30% since forecasting inaccuracies typically drive around 75% of the required safety stock.
- In a hybrid company (part make-to-stock (MTS) and part make-to-order (MTO)) the downstream inventory reduction could range from 5% to 10% depending on the balance of MTS and MTO.
- In a pure make-to-order company the collaborative component of forecasting drives nearly all the savings in a range from 5% to 15%.

## Reduction in lead times to bring products to market

The correlation between time-to-market and profitability is well known. In fact, a report published by McKinsey claimed that on average, businesses lose 33 percent of profit by launching a project on-budget but behind schedule by six months. In comparison, the study found that launching a product on-time, but 50 percent over budget, only resulted in a 3.5 percent loss in profitability.



Now, due to the rise of the digital economy, the correlation between profitability and time-to-market is becoming stronger every day. By monitoring your lead times before implementing any IT solution and then with better planning and forecasting, how has this reduced, is a very clear metric to senior management to affect profitability.

## Full price sell-through

Retail is a blend of art and science. Sometimes you need to go on instinct, sometimes you need to look at the numbers. With full price sell through, there can be so many factors that play into it as a metric e.g. were the right products bought in the first place that were fit for market, availability etc.

Sell-through tells you how fast your inventory is moving. 100% sell-through means that you have completely sold out, while 0% means that you have not sold any. Similar to Stock Turn, sell-through can be useful throughout the year. Use Stock Turn or Stock Cover when planning for the year and season, and sell-through to keep core products stocked up throughout the year.

One practical form of measurement is to take a fairly neutral continuity area like jeans and analyse before and after these solutions were introduced. Seasonal retailers like apparel and shoes, should look at sell-through at least every four weeks. Faster turning retailers, like dollar stores, look at sell-through daily.

Rates vary hugely across different categories and retailers; some retailers may achieve an 80 percent sell-through rate by the time their markdown period begins others 40-50%.

## Soft or in-direct cost savings

Most retailers desire that new systems save time for the users to be more productive and not put additional time into an already busy week.

**Most retailers will say that systems have reduced manual input and integrity of data with one version of all activity.** This can be measured by doing a time and motion study on certain planning, forecasting or allocation tasks before the solution is implemented and then do the same study say 5-6 months after go-live when users are familiar with the new solution. The number of hours saved can then be assessed.

One example of this is forecast process automation will reduce the time spent on creating and managing the overall forecast process. However, it rarely results in a hard-labour cost savings due to the redeployment of staff. Operational efficiency gains from planning and scheduling improvements will be driven by a more accurate, dependable and sometimes more detailed forecast.



# How to calculate ROI?

The final step in the process is to calculate ROI by translating performance metric measurements into dollars/pounds based on the economics of your company. Of course, every company has different operational costs, different forecast accuracy improvements when translated into the associated revenue/margin impact, and variable costs associated with inventory throughout their extended supply chain. This means that the finance teams at retailers need to establish the relationships between process metrics and the company's operating costs. Plus looking at the softer benefits, such as time savings, as you move from manual to more automated processes and then the associated efficiencies of personnel within the business, being able to focus on the results rather than the collation of the results.

Many successful retailers constantly measure and calculate ROI, especially when embedding new practices, structures, processes or technology. You may first look at ROI 1 month after the changes, then again 6 months and 1 year.



# Key Takeaways

- Too many executives focus on markdowns – focus on sell-throughs
- Make sure your full price sell-through are maximised. Always set buyers and planners key performance indicators in this area
- Create a detailed business process model and tools with clear accountabilities & responsibilities
- Buying and planning need to work as a team
- Set up a buying and merchandising academy to ensure there is engagement in the discipline you require



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# Island Pacific SmartPlanning

## Overview

With consumer demand increasing across retail, wholesale and ecommerce, it is now more important than ever for businesses to ensure inventory is in line with demand. Island Pacific SmartPlanning is a sophisticated, intuitive and integrated support tool that helps with merchandising across all channels, from planning right through to assortment, allocation, and replenishment of stock.

Island Pacific SmartPlanning is **extremely versatile** modular software. Modules can be taken separately or as an integrated solution, **depending on what best suits your needs**. The software has been **specifically designed to integrate** with all other modules from Island Pacific or your existing ERP systems and databases, providing complete control over merchandise management. Modules can be configured to fit easily with your retail planning processes. Planning work flow, structures and performance measures to support your pre-season planning, in-season re-forecasting and of course; the all-important analytics, using both standard and attribute hierarchies to plan your business the way your customers shop.

With over 30 years' experience providing world class merchandising and store operations software to the retail industry, Island Pacific will partner with you to ensure the Island Pacific SmartPlanning solution is **customised to work seamlessly for your merchandising needs**. To find out more, or for a product demonstration, contact us today.



Island Pacific  
SmartPlanning



Planning Analytics



Allocation Manager



Replenishment Manager



Assortment Manager



Merchandise Planning

## Benefits

- ▼ **Multi-channel:** Manage merchandise planning for all channels using a single integrated solution
- ▼ **Configurable:** Provides best practice retail planning with business specific configuration
- ▼ **Save time:** Reduced manual input and integrity of data with one version of all activity
- ▼ **Proven track record for return on investment in critical areas such as:** Improved stock turn, increased mark-ups, lower average inventory, increases in gross margin and cash flow
- ▼ Full life cycle management from planning to operational systems for purchasing, allocations and master data management
- ▼ **Improve Forecasting:** Ensure smooth product launches, using accurate analytics that draw on past trends, present data and measurable KPIs
- ▼ **Flexible:** Select the modules that best meet your needs and planning objectives

## Features

- ▼ **Top down, bottom up pre-season and in season merchandise planning as well as key item forecasting across multiple channels**
- ▼ **Assortment Manager:** Transition seamlessly from high level planning into Assortment Planning
- ▼ **Open to buy management and control**
- ▼ **Allocation module:** Streamline your cross channel – making the process faster and more efficient than before
- ▼ **Replenishment module:** Manage stock replenishment, using dynamic calculations that can be amended based on past trends and future sales projections
- ▼ **Planning Analytics:** For key performance analysis across all planning and third party data for detailed and exception reports
- ▼ **Intuitive user interface.**