State of the
Retail Supply Chain
2016

EUROPE & NORTH AMERICA

Research findings on Supply
Chain Planning & Execution

RELEX

Contents

Foreword

Welcome to the 2016 report into the State of the Retail Supply Chain, commissioned by RELEX and researched by Martec International. Last year, we focused on the UK. This year we've included Germany, the Nordics and North America as well. With over 120 retailers taking part, their combined sales topping €550 Billion ($607bn), it's an important snapshot of the supply chain world.

There was a time when supply chain professionals were the Clark Kents of retail; toiling away unnoticed while others garnered most of the credit for their heroic achievements.

But this is a time of enormous change in supply chain management. No longer is it simply the humdrum process of getting products onto shelves. Rather it's fast becoming one key, perhaps the key, determinant of business success in the current market.

We live in a world where the fastest changing area of retail is arguably customer expectation. The web makes instant price comparisons not just possible but simple. Anyone on the internet has access to any product anywhere. The fulfilment window is shrinking; this is an age of instant gratification where waiting a week is becoming unthinkable. Some players are pioneering one-hour, click-to-knock delivery and are buying shipping fleets, jumbo jets and drones to achieve it. 'Now' is the new normal.

So when people ask 'why should I upgrade my supply chain now?' I tell them; 'Because your competitors are doing exactly that to meet those higher customer service expectations.' And there's a second equally good reason; 'because it will save you money'. If you could save money now, why would you wait?

The answer to that is interesting. 'Budgets' which, according to Martec, is usually the top reason given for putting off projects, is here only the third most common explanation behind 'other business priorities' and 'complexity'.

Every business must decide its own priorities, but with one in five of those surveyed actively looking to upgrade their supply chain systems, it's clearly top of the list for many. As for complexity, the era of detailed specification in advance, armies of consultants and long drawn out implementations is passing. Good systems are agile, projects led by customers take a few months rather than years and pay for themselves just as fast.

And those systems can make dealing with major supply chain challenges so much easier. According to the report, those that cause most headaches include forecasting, managing uplift from promotions and seasons, and the introduction of new lines – all easier with good, modern supply chain management systems.

New technology is helping supply chain professionals do more. They're developing new skills. Postgraduate supply chain courses are springing up across the globe. There's a rush to recruit young talent. Awareness of the huge contribution skilled supply chain managers can make is growing fast.

This is the world you work in. It's an exciting sector to be in right now as the spotlight turns onto the valuable work you do. Supply chain Clark Kents, come out of your phone boxes now!

Mikko Kärkkäinen
Group CEO
RELEX Solutions

Research Highlights

This research covers North American and Northern European retailers with sales in excess of €100 million ($110m) p.a. We interviewed 126 retailers across North America, Germany, UK and the Nordics. We are confident that the findings are applicable to other retailers in these countries.

We have established a benchmark for supply chain planning and execution. The average retailer is designated '2.0', or 'standard'. Retailers at the standard level have started to automate, but there are still a number of basic, manual processes and systems in the business. There is variable visibility of the supply chain. Stock holding can be high and is not optimized across all sales channels. Reporting is time consuming and takes around 1–1.5 hours for standard reports. There is limited analysis and management of promotions. We have benchmarked each retailer that has participated and highlighted strong and weak areas and a strategy for improvement.

Retailers recognise that they have a way to go before their supply chains are fully visible; they give themselves an average of 6.2 out of 10 for supply chain visibility. Small format speciality retailers have the worst supply chain visibility (5.6 out of 10) mainly because orders are placed many weeks or months in advance with overseas suppliers.

The top business issue with regard to supply chain planning and execution is increasing availability without increasing stockholding – highlighted by 62% of those interviewed. This may sound like a given but it is by far the biggest issue for retailers and stockholding is by far their biggest cost of doing business. The focus is on improving customer service without adversely affecting stock holding costs.

Each supply chain team member forecasts and replenishes goods to an average retail value of €172m ($190m). Efficiency improves as the company gets larger, but efficiencies only really kick in when sales exceed €1 billion ($1bn). North America (with the largest average size of retailer) is the most efficient in terms of geography with €245m ($270m) of sales controlled per FTE (full time equivalent employee). Looking at retail sectors, food and drug retailers, with their lower margins and higher volumes of sales, are the most efficient with an average of €302m ($333m) in sales controlled per FTE. Mass merchants and department stores are the least efficient with €92m ($101m) per person, but they have the largest and most complex ranges.

54% of all omni-channel retailers operate a single stock pool across all sales channels. This is really quite high and demonstrates how quickly retailers are working to reduce stock holding costs across their

businesses. Large format speciality retailers are most likely to have a single stock pool across all sales channels (56%) while food and drug retailers are the least likely (20%). Most food retailers tend to use stores for fulfilling customer orders.

Promotions management is highlighted as a major challenge by 64% of retailers yet only 35% have a system capable of building an automatic demand forecast for promotions and only 22% are able to manage promotion stock run down with their current system.

Retailers spend a very long time in report generation – on average 79 minutes preparing a standard report and 110 minutes preparing an ad hoc report.

Forecasting for new products is a significant challenge for 58% of retailers, yet only 42% are able to show new product pipeline stock build in their supply chains.

Forward looking analytics on stock and forecast are not yet the norm. Only 42% of retailers can accurately forecast future out of stocks with their current system and only 30% can recommend markdowns by item and store / location.

Given these systems limitations it is not surprising that about a fifth of all retailers are planning to replace (or implement for the first time) supply chain systems. A significant proportion of retailers have no systems or use spreadsheets for forecasting for stores (9%) and this is 8% for forecasting for DCs. This survey excludes the smallest retailers with sales of less than €100 million ($110m) where a lack of systems may be more understandable.

The average age of all forecasting and replenishment systems is 7.5 years. This is high and reflects the fact that 27% do not invest in new systems due to the perceived complexity and 23% due to investment being tied up in in-house developed or legacy ERP systems.

The reasons for investing in new systems (amongst those who had or were planning to) are that old systems couldn't cope with growth (in channels, number of stores or range expansion) and/or that teams were spending too long crunching data and not enough time making decisions (18% for each). In fact the third business issue cited is automating key processes, which confirms this reason for replacing supply chain systems.

FOOD & DRUG RETAILERS

This research is based on interviews with 126 retailers of which 32% are food and drug retailers, i.e. 40 companies. These include supermarkets, cash and carry, convenience stores, chemists and drug stores.

A major difference between food and drug retailers with more than one sales channel and other sectors is that they are far less likely to operate a single stock pool, 20% vs the all retailer average of 43%. This is because most food retailers use local stores to fulfil internet orders rather than DCs and so in effect have lots of stock pools in each store. This works in food and drug because in stock service levels are much higher than other retail segments.

Food and drug retailers rate the visibility of their supply chain at pretty much the all sectors average level and so have the same issues with supply chain visibility as everyone else.

Retailers in this sector are more efficient than other retailers in terms of staff productivity. The average full time equivalent employee forecasts and replenishes an average of €302 million ($333m) of sales. This compares very favourably with the all sector average of €172 million ($190m)of sales and is probably because of the lower margins of food retailers as well as their larger average company size. This enables them to achieve greater efficiencies.

Food and drug retailers spend slightly less time preparing reports than average, though it is still a considerable drain on productive time of staff at 62 minutes for a standard report vs 79 minutes for the average. Preparing ad hoc reports is quicker for food and drug retailers at 105 minutes v 110 for the all sector average. Again this may be explained by the faster turns and lower margins of food and drug retailers, but it still seems to be rather high and undermines the ability to carry out productive analysis and decision making.

In terms of analysis and reporting food and drug retailers are more likely to have systems that allow them to build supply chain plans based on store/ SKU forecasts and alerting on future capacity challenges in DCs and stores than other retailers, 62% have current capability compared to 49% for all retailers. With the higher volumes replenished and forecast by food retailers it makes sense that their systems are superior. However a smaller proportion have systems that allow them to redistribute stock to outlets with higher sales, only 28% vs 42% for all retailers. Not many food and drug retailers will redistribute stock across their stores because of the high cost and lower gross margin compared to speciality and department store retailers.

SMALL FORMAT SPECIALITY RETAILERS

This research is based on interviews with 126 retailers of which 21% are small format speciality retailers, i.e. 26 companies. These include clothing, shoes, accessories, books and toy retailers.

Small format speciality retailers rate the visibility of their supply chain lower than the other retail sectors at 5.6 out of 10, compared to the all sectors average level of 6.2. We believe that this is because small format speciality retailers are more likely to place orders many weeks in advance of the season, use overseas suppliers and don't have visibility of supply chain issues until it is too late and goods are delayed.

Retailers in this sector are less efficient than average in terms of staff productivity. The average full time equivalent employee forecasts and replenishes an average of €117 million ($129m) of sales. This compares unfavourably with the all sector average of €172 million ($190m) of sales. Though it is the highest of the non-food sectors. This may be because many small format speciality retailers, especially fashion companies, do not carry out a great deal of replenishment as a high percentage of goods are allocated at the start of the season and are often sold out from stores rather than replenished regularly.

Small format speciality retailers spend slightly more time preparing reports than average, making this a considerable drain on productive time at 92 minutes for a standard report vs 79 minutes for the average. Preparing ad hoc reports is slower for small format speciality retailers at 129 minutes vs 110 for the all sector average. But there is not that much of a difference compared to the average but it does mean that there is less time to carry out productive analysis and decision making. In fashion especially, reporting is also more challenging because of the additional complexity of size, colour and fit.

Small format speciality retailers with more than one sales channel have average levels of use of a single stock pool, 44% compared to 43% for all retailers. Small format speciality retailers benefit significantly from the reduced stock holding and better availability a single stock pool brings.

Small format speciality retailers have reduced supply chain analysis and reporting capabilities compared to other sectors. In particular a smaller proportion can build supply chain plans based on store/SKU forecasts and alerting on future capacity challenges in DCs and stores, 18% can do this now, compared with 49% for all retailers. Retailers like supermarkets with faster moving supply chains and more continuity items tend to focus on this and get more benefits from it than small format speciality retailers. Small format speciality retailers are also less likely to have systems that allow them to recommend markdowns by item and location or store, 18% can do this compared to 30% of all retailers. This is surprising as markdowns are a big issue for small format speciality retailers, but is really a reflection of less developed supply chain systems in this sector. It's worth noting that for most of the analysis and reporting capabilities we asked these retailers about at least a third of companies could carry out the analysis partially. This is a sector where there are lots of work arounds and manual processes to supplement systems.

Compared to food and drug and general merchandise retailers, fashion retailers often do a more macro level of assortment or range planning with specific product level data confined to stand alone spreadsheets, which also inhibits systems effectiveness.
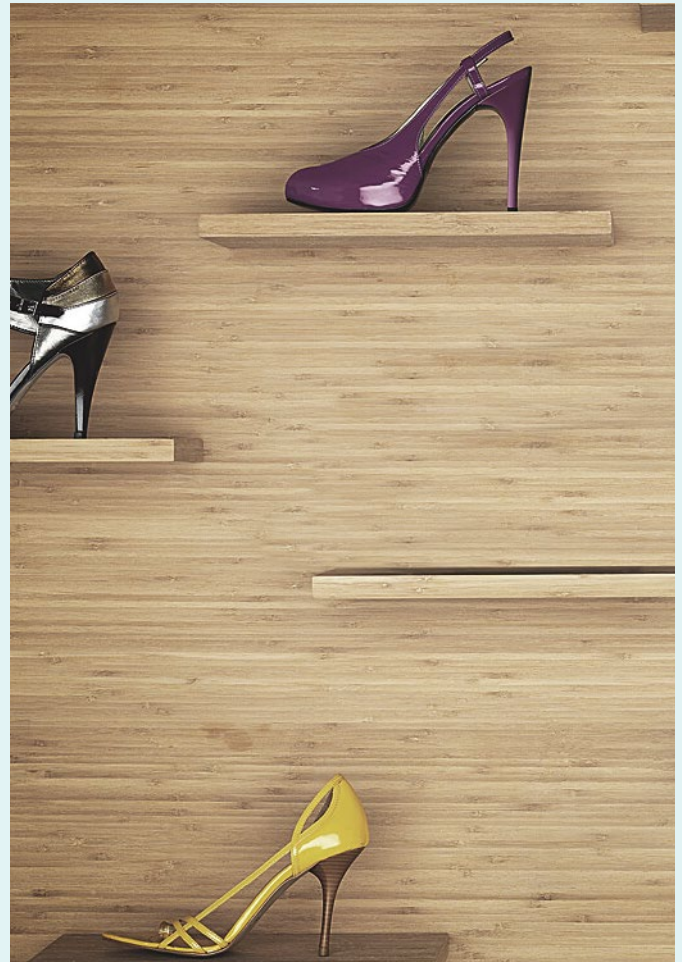
LARGE FORMAT SPECIALITY RETAILERS

This research is based on interviews with 126 retailers of which 25% are large format speciality retailers, i.e. 32 companies. These include DIY, motoring, garden centres and electrical retailers. Large format speciality retailers rate the visibility of their supply chain at pretty much the all sectors average level and so have the same issues with supply chain visibility as everyone else.

Retailers in this sector are less efficient than average in terms of staff productivity. The average full time equivalent employee forecasts and replenishes an average of €93 million ($103m) of sales. This compares unfavourably with the all sector average of €172 million ($190m) of sales. Food and drug retailers perform the most efficiently and we would have expected large format speciality, which also operates category management style processes to be more in line with food retailers.

Large format speciality retailers spend the least time preparing reports than average, though it is still a considerable drain on productive time at 54 minutes for a standard report vs 79 minutes for the average. Preparing ad hoc reports is also much quicker for large format speciality retailers at 46 minutes vs 110 for the all sector average. This is the only sector where ad hoc reports are quicker to produce than standard ones. This may

be a reflection of the companies using superior systems rather than any sector differences. Generally these companies tend to be larger and have more investment capacity to devote to systems.

Large format speciality retailers have the highest levels of use of single stock pools. 56% of omni-channel retailers in these sectors have a single stock pool compared to the overall average of 43%. Very often retailers such as electrical and DIY retailers sell products with a high unit value and so the benefits of being able to maximize availability while reducing stock holding are greatest in this sector.

In terms of analysis and reporting large format speciality retailers have systems that are fairly average in terms of functionality. The areas they perform best are in calculating shortages caused by availability issues by supplier – 61% of large format speciality retailers can do this compared with an average of 49%. This again reflects the impact of the relatively high unit values of most large format speciality retailers compared to other sectors. 63% of retailers in this sector are able to redistribute excess stock to outlets with higher sales compared with only 42% of all retailers; again it is more cost effective to do this in the large format sector than for other retailers.

MASS MERCHANTS AND
DEPARTMENT STORE RETAILERS

This research is based on interviews with 126 retailers of which 22%
are mass merchants and department store retailers, i.e.28 companies.
Mass merchants are those selling a wide range of different products
and also include discounters.

Mass merchants and department store retailers rate the visibility of
their supply chain at pretty much the all sectors average level and so
have the same issues with supply chain visibility as everyone else.

Retailers in this sector are less efficient than other retailers in terms
of staff productivity. The average full time equivalent employee forecasts
and replenishes an average of €92 million ($101m) of sales. This is much
lower than the all sector average of €172 million ($190m) of sales and
is probably because of the complexity, larger number of SKUs and more
seasonal business than other sectors, notably food. Like fashion retailers,
companies in this sector have the complexity of size, colour and fit
for their apparel or fashion ranges.

Mass merchants and department store retailers spend more time preparing reports than average, taking 116 minutes for a standard report vs 79 minutes for the average. Preparing ad hoc reports is even more time consuming for retailers in this sector at 167 minutes vs 110 for the all sector average. This may also be explained by the greater complexity of the product ranges and larger numbers of SKUs mass merchants and department store retailers typically have. This reflects itself in more complex merchandise hierarchies because of the wide mix of product types and merchandise hierarchies greatly influence the efficiency of production of reports.

Mass merchants and department store retailers with more than one sales channel are more likely to operate a single stock pool than average, 52% vs the all retailer average of 43%. This may be because this type of retailer is more likely to benefit from the increased availability a single stock pool brings.

In terms of analysis and reporting for mass merchants and department store retailers the main differences are that they are more likely to be able to calculate the total inventory for single items across the entire replenishment network, 88% can do this, compared to 70% for all retailers. The high average transaction value for many department store retailers especially means that this is crucial. But a much smaller proportion of mass merchants and department store retailers than average are able to calculate shortages caused by availability issues by supplier (34% vs 49% for all retailers). Retailers in this sector are likely to have a large number of suppliers, because of the large number of SKUs they offer and so this makes it a more complex task than for retailers in other sectors. 44% are able to do this partially which underlines the complexity of the task.

NORTH AMERICAN RETAILERS

This research is based on interviews with 126 retailers of which 26% are North American. This includes US and Canadian retailers. We interviewed North American retailers with sales of €311 billion ($343bn) which is a 2% share of this market.

The top issues regarding supply chain planning and execution for North America are fairly similar to the global average. However better collaboration with suppliers is second and like Germany is a higher priority than average. Some retailers mentioned that they had worked on supply chain issues internally and feel that most benefit will be made from external supply chain improvements.

If we look at challenges regarding forecasting by country, North American retailers are most concerned about forecasting for new products (73% see this as an issue compared to 58% for all retailers). The US tends to be the country where most new products are developed and launched and so this causes greater problems for North American retailers than elsewhere where there is a lower proportion of new products in an assortment typically.

North American retailers rate the visibility of their supply chain at pretty much the same as the all countries average level (6.5 vs 6.2) and so have the same issues with supply chain visibility as everyone else.

Retailers in North America are more efficient than retailers in other countries in terms of staff productivity. The average full time equivalent employee forecasts and replenishes an average of €245 million ($270m) of sales. This compares very favourably with the all country average of €172 million ($190m) of sales and is probably because of the larger average size of the North American retailers we interviewed who are able to realize greater economies of scale than in smaller countries. It is easier to grow a big chain and achieve economies of scale in the US simply because there are so many cities where a retailer can open a store.

North American retailers with more than one sales channel are marginally less likely than average to operate a single stock pool (39% of retailers vs the all country average of 43%).
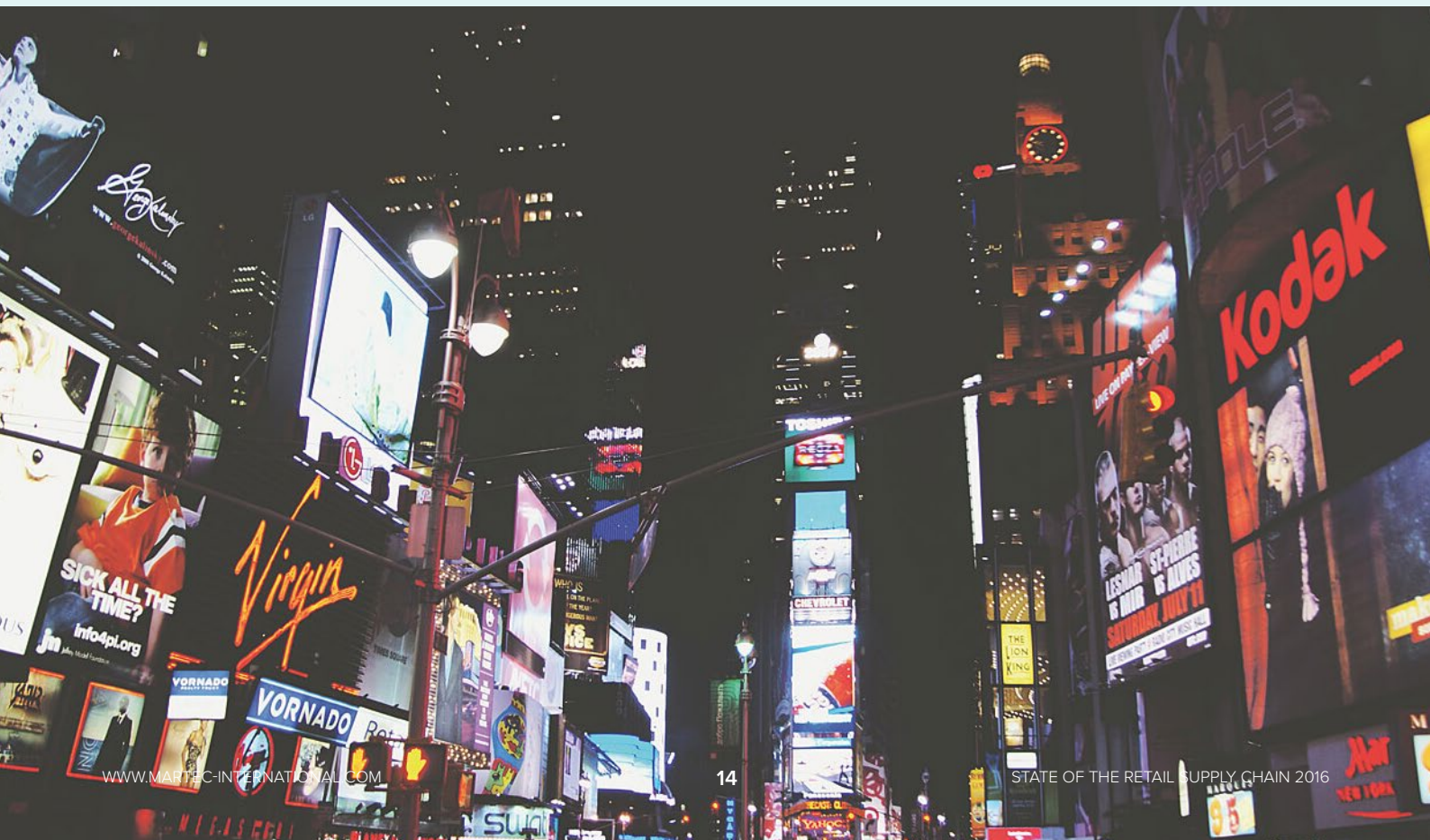
UK & IRISH RETAILERS

This research is based on interviews with 126 retailers of which 21% are from the UK and Ireland. We interviewed UK and Irish retailers with sales of €100 billion ($110bn) which is a 28% share of this market.

The top issue regarding supply chain planning and execution for UK retailers is automating key processes (52% of companies), which is number three for all retailers. This ties in with the joint top reason for replacing systems which is because too much time is spent data crunching. The UK then has the same priorities as for the all retailer average which are increasing availability without increasing stock holding and reducing stock holding without impacting sales.

If we look at challenges regarding forecasting by country UK retailers fall in line with the global averages and their key concerns are forecasting effectively across the supply chain (67%) and forecasting effectively for promotions and promotional lift (63%). The advanced state of omni-channel retailing in the UK means that forecasting across sales channels is a particular challenge.

UK retailers rate the visibility of their supply chain the lowest of all regions at 5.4 out of 10 vs 6.2 for the average. We're not really sure why this is the case, this is self-scored so maybe UK retailers are the most pessimistic.

Retailers in the UK are the least efficient in terms of staff productivity. The average full time equivalent employee forecasts and replenishes an average of €73 million ($81m) of sales. This is much lower than the all country average of €172 million ($190m) of sales. There are a high proportion of older and in-house developed systems in the UK than in other countries and this coupled with the smaller size of chains compared with North America may account for this poor performance.

UK retailers with more than one sales channel are marginally less likely to operate a single stock pool than average (39% of retailers vs the all country average of 43%).

NORDIC RETAILERS

This research is based on interviews with 126 retailers of which 19% are from the Nordics. This covers Denmark, Finland, Norway and Sweden. We interviewed Nordics headquartered retailers with sales of €40 billion ($44bn) which is a 21% share of this market.

The top issue regarding supply chain planning and execution for Nordics based retailers is increasing availability without increasing stock holding (56%) and this is the top issue for all retailers too. However handling promotions effectively is the number two issue and this is not such a high priority for retailers in other regions. This ties up with the fact that 84% of Nordics retailers see forecasting effectively for promotions and promotional lift as a challenge (and a much higher proportion than for all retailers where it is 64%).

In the Nordic countries by far the main challenge is forecasting effectively for promotions and promotional lift. Promotions are number two for everyone else. The reason for the focus on promotions in the Nordics may be because the retailers in this region have newer systems than in other countries and so are now able to perform better promotional analysis and planning.

Nordic retailers rate the visibility of their supply chain at pretty much the same as the all countries average level (6.0 vs 6.2) and so have the same issues with supply chain visibility as everyone else.

Nordics based retailers are much less efficient in terms of staff productivity. The average full time equivalent employee forecasts and replenishes an average of €85 million ($94m) of sales. This is much lower than the all country average of €172 million ($190m) of sales. The average size of retailers in the Nordics is much smaller than North America but their ranges are often as wide in many categories, so they cannot make the same economies of scale. The width of the product range is a bigger determinant of headquarters staffing needs in supply chain management than the number of stores or channels, though both are important.

Nordics based retailers with more than one sales channel are marginally more likely to operate a single stock pool than average (48% of retailers vs the all country average of 43%).

GERMAN RETAILERS

This research is based on interviews with 126 retailers of which 34% are German companies. We interviewed retailers with sales of €100 billion ($110bn) which is a 23% share of the German market.

The top issues regarding supply chain planning and execution for German retailers are fairly similar to the all countries average. However better collaboration with suppliers is second and, like North America, is a higher priority than average. Some retailers mentioned that they had worked on supply chain issues internally and feel that most benefit will be made from external supply chain improvements.

If we look at challenges regarding forecasting by country, German retailers' top challenge is coping with changes in the rate of sale (85%), this is less of an issue for all retailers worldwide at 59%. This is followed closely by forecasting effectively across the supply chain (83%) and is the top challenge for all retailers.

German retailers rate the visibility of their supply chain slightly higher than the all countries average level (6.6 vs 6.2) but this is not a major difference.

German retailers are much less efficient in terms of staff productivity. The average full time equivalent employee forecasts and replenishes an average of €98 million ($108m) of sales. This is much lower than the all country average of €172 million ($190m) of sales. The average size of retailers in Germany is much smaller than North America and so means they cannot make the same economies of scale.

German retailers with more than one sales channel are marginally more likely to operate a single stock pool than average (46% of retailers vs the all country average of 43%).
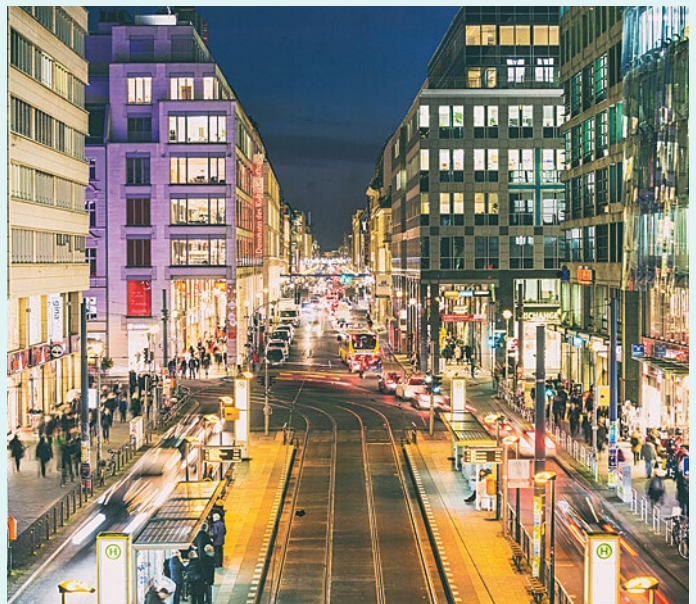
Visibility of the Supply Chain

We asked retailers to score the visibility of their supply chain out of 10, with 1 being low visibility and 10 being fully visible. We specifically asked about visibility of future stock levels and staffing requirements.

The average score was 6.2 out of 10 which shows that retailers feel they have a fair way to go before they have full supply chain visibility. Mass merchants and department store retailers have a slightly higher than average score at 6.4 out of 10, though there is really very little difference compared to food and drug retailers and large format speciality companies (both 6.3). The main difference is the lower score of 5.6 for small format speciality retailers who have the least visible supply chains. Mostly these retailers have lengthy supply chains using overseas suppliers and shipping of goods to them. So they tend to have more time in their supply chains and more uncertainty and are also less able to do anything about problems. Retailers in other sectors are more likely to buy from local suppliers and have shorter supply chains which require more attention and changes to orders.

"Our supply chain and logistics are currently separate systems and we have to link the two together manually".
Director of Operations,
Large Format Speciality Retailer

"I have no visibility from our suppliers, the industry is very backward so often they can't get the information from their central manufacturing companies."
Head of Supply Chain,
Large Format Speciality Retailer

"It is visible but we don't know where stock is by location - it could be on the shop floor, in the DC and the buyers are expected to know."
Logistics Manager,
Department Store Retailer

▼ Visibility of the supply chain by retail sector

Score	Sector
6,2	All retailers
6,4	Mass merchants and department stores
6,3	Large format speciality
6,3	Food and drug
5,6	Small format speciality

AVERAGE MARKS OUT OF 10

All retailers	6,2
Germany	6,6
North America	6,5
Scandinavia	6,0
UK	5,4
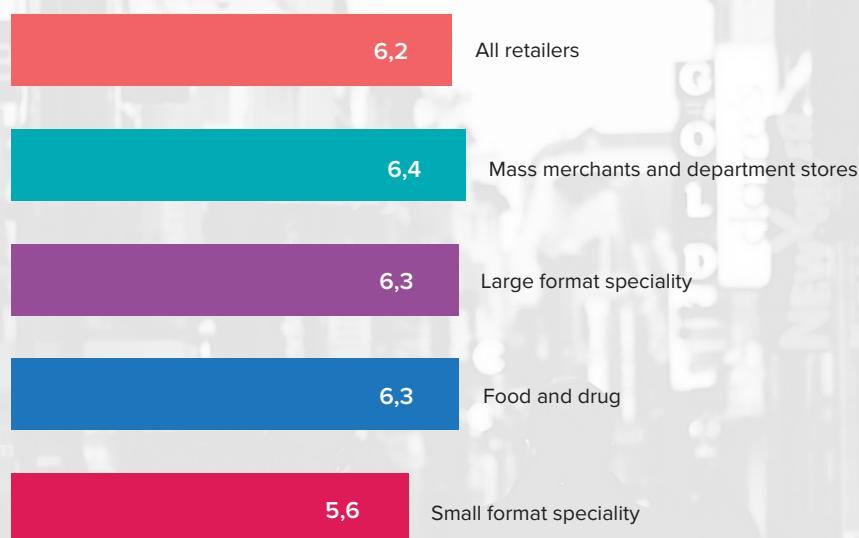
AVERAGE MARKS OUT OF 10
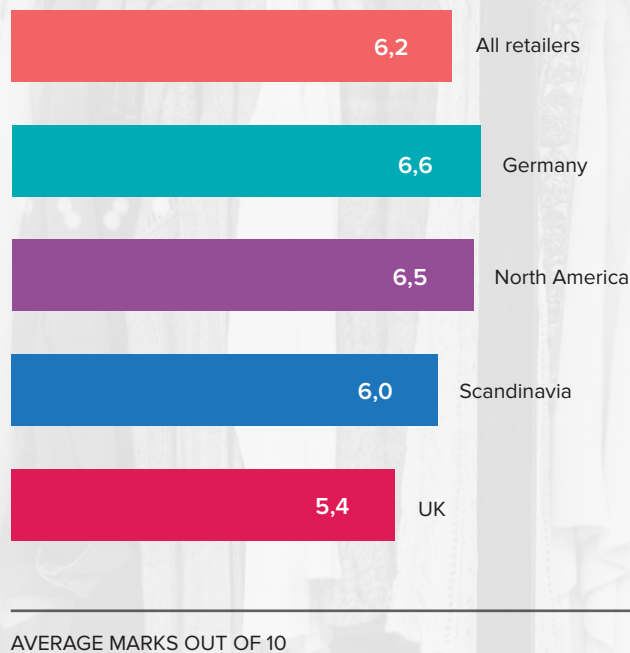
▲ Visibility of the supply chain by country

There is very little difference in visibility of supply chain by country, apart from the UK where it is much lower than average at 5.4 out of 10 and this is a drop from last year when the average score was 6.4 out of 10. There is a different mix of retailers last year to this year which may account for the difference.

"It is very limited as we have to pull worldwide data and we only get a snap shot once a week, it's hard to do at a pace."
Senior Supply Chain and Implementation Manager, Small Format Speciality Retailer

"We have no integration between our warehouse replenishment and our store replenishment systems."
Logistics Director, Food Retailer

"It's all very siloed at the moment, it's tying it all up that is the problem."
Logistics Director, Department Store Retailer

"There is far too much that goes from the vendor to stores directly that we don't have visibility of."
Group Supply Chain Director, Large Format Speciality Retailer

Top Three Issues Regarding Supply Chain Planning and Execution

By far and away the biggest issue for supply chain executives is increasing availability without increasing stock holding, highlighted by 62% of the retailers interviewed. This was an unprompted question and so the fact that it was highlighted by such a large proportion of the group shows what an important issue improving customer service and availability really is. It may sound like a supply chain fundamental but it is very difficult to achieve. The next most important issue is reducing stock holding without impacting sales, mentioned by 47% of retailers. This challenge focuses more on cost savings rather than improving availability. In fact these were the top two issues for UK retailers in last year's survey.

In joint third place are automating key processes and better collaboration with suppliers, both highlighted by 44% of retailers. In fact the reason many retailers implement new systems is to allow their teams to spend more time decision making rather than number crunching and operating manual processes. Better collaboration with suppliers is a natural focus for companies that have worked hard on their internal processes and now need to get benefits from the extended supply chain.

▼ Top 3 issues regarding supply chain planning and execution

	%	Issue
	62%	Increasing availability without increasing stock holding
	47%	Reducing stock holding without impacting sales
	44%	Automating key processes
	44%	Better collaboration with suppliers
	31%	Handling promotions effectively
	29%	Managing product introductions and terminations effectively
	15%	Implementing a single stock pool
	15%	Reducing wastage
	6%	Improving forecasting
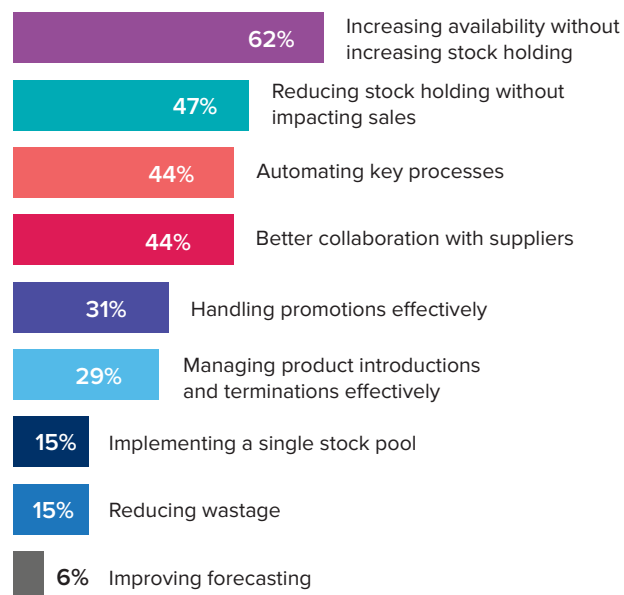
% OF RETAILERS

"Improving availability and reducing working capital are our two main priorities."
Group Supply Chain Director,
Large Format Speciality Retailer

"Culture and getting people to think end to end … people are incentivised in siloes not across the end to end business."
Logistics Director,
Department Store Retailer

"Our main aim is to get joined up visibility through a new system and processes."
Stock Distribution Controller,
Small Format Speciality Retailer

"Better links between trading / buying and supply chain. Buyers want to buy great deals and supply chain want to run a lean supply chain so the two have to work together better."
Supply Chain Manager,
Food and Drug Retailer

"All our data is on Excel spreadsheets we have no standard systems."
Senior Supply Chain and Implementation Manager,
Small Format Speciality Retailer

"We need to share long range forecasts with suppliers rather than just transactional information, we have focused on the last 7 days of the supply chain and yet ignored the 7 to 12 weeks previous to that."
Operations and Logistics Director,
Food Retailer

"Combining B2C and the store supply chain is challenging in an omni-channel world."
Logistics Director,
Small Format Speciality Retailer

▼ Top 3 issues regarding supply chain planning and execution by country

ALL

62%	Increasing availability without increasing stock holding
47%	Reducing stock holding without impacting sales
44%	Automating key processes

NORTH AMERICA

67%	Increasing availability without increasing stock holding
48%	Better collaboration with suppliers
45%	Reducing stock holding without impacting sales

UK

52%	Automating key processes
37%	Increasing availability without increasing stock holding
22%	Reducing stock holding without impacting sales

GERMANY

78%	Increasing availability without increasing stock holding
73%	Reducing stock holding without impacting sales
73%	Better collaboration with suppliers

NORDICS

56%	Increasing availability without increasing stock holding
56%	Handling promotions effectively
36%	Reducing stock holding without impacting sales

If we look at the top three issues by country the importance of increasing availability without increasing stock holding is in every country's top three and really the key aim of all supply chain planning and execution. Reducing stock holding without impacting sales is also in every country's top three issues and is really the other way of looking at the issue of increasing availability without increasing stock holding. In North America and Germany better collaboration with suppliers is in the top three and may indicate that retailers in these countries have made significant improvements to their supply chain internally and are now looking to their suppliers to realise more benefits. In the UK automating key processes is their number one issue and helps explain the UK's bottom place in terms of the size of teams relative to the size of the business. In the Nordics handling promotions effectively comes second and retailers in these countries also highlighted promotional forecasting as their top challenge.

Challenges Regarding Forecasting

We presented retailers with a list of potential forecasting challenges and asked them which ones were problems in their business. Virtually all of them are a challenge for at least half the retailers but top of the list is forecasting effectively across the supply chain highlighted by 69% of companies. This covers supplier collaboration as well as forecasting across all sales channels which becomes more complex as the omni-channel business increases. Forecasting effectively for promotions and promotional lift comes second with 64% raising this issue. Promotions are a massive part of most retailers businesses and running successful, profitable promotions is one of retail's key challenges. It is not easy to maintain customer service if stocks run out too soon for key promotions.

In third place is forecasting heavily seasonal items – an issue for 60% of retailers, though for some companies this is just business as normal as most retailers rely on heavily seasonal goods.

"We've done a lot of work on building weather into our systems."
Logistics and Operations Director, Food Retailer

"Forecasting for new products is normally OK unless it is a completely new product. Usually we base it on something similar and get guidance from the supplier too."
Supply Chain Manager, Food Retailer

"Easter is our biggest sales period and we tend to solve the issue by putting out very high volumes to the stores."
Supply Chain Manager, Large Format Speciality Retailer

"We are not very flexible if it doesn't go to plan."
Head of Supply Development, Mass Merchant

"Promotions is the big one and our promotions are so complicated, a quarter to a third of our sales are made on promotions."
IT and Ecommerce Director, Food Retailer

▼ Challenges regarding forecasting

69%	Forecasting effectively across the supply chain
64%	Forecasting effectively for promotions and promotional lift
60%	Forecasting heavily seasonal items
59%	Coping with changes in the rate of sale
58%	Forecasting for new products
52%	Forecasting changes due to the weather more effectively
48%	Forecasting for special events
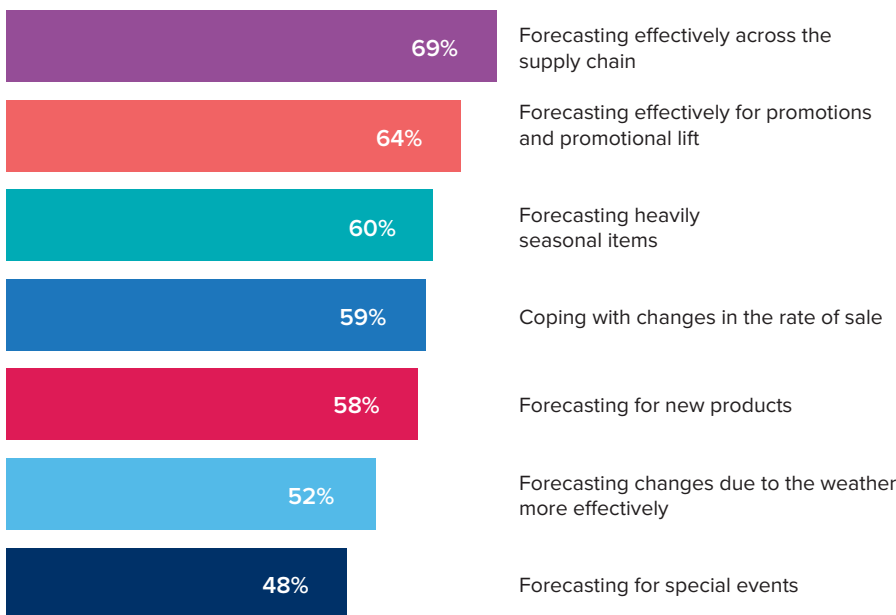
% OF RETAILERS

▼ Challenges regarding forecasting by country

Forecasting effectively across the supply chain
- ALL RETAILERS: 69%
- NORTH AMERICA: 55%
- UK: 67%
- NORDICS: 72%
- GERMANY: 83%

Forecasting effectively for promotions and promotional lift
- ALL RETAILERS: 64%
- NORTH AMERICA: 52%
- UK: 63%
- NORDICS: 84%
- GERMANY: 65%

Forecasting heavily seasonal items
- ALL RETAILERS: 60%
- NORTH AMERICA: 52%
- UK: 48%
- NORDICS: 72%
- GERMANY: 73%

Coping with changes in the rate of sale
- ALL RETAILERS: 59%
- NORTH AMERICA: 42%
- UK: 52%
- NORDICS: 52%
- GERMANY: 85%

Forecasting for new products
- ALL RETAILERS: 58%
- NORTH AMERICA: 73%
- UK: 56%
- NORDICS: 68%
- GERMANY: 45%

Forecasting changes due to the weather more effectively
- ALL RETAILERS: 52%
- NORTH AMERICA: 64%
- UK: 44%
- NORDICS: 72%
- GERMANY: 35%

Forecasting for special events
- ALL RETAILERS: 48%
- NORTH AMERICA: 24%
- UK: 33%
- NORDICS: 68%
- GERMANY: 68%

% OF RETAILERS

Legend:
- ALL RETAILERS
- NORTH AMERICA
- UK
- NORDICS
- GERMANY

Size of Replenishment and Forecasting Teams

€172.2m ($189.9m)	All retailers
€23.6m ($26m)	Sales <€500m (<$552m)
€26.9m ($29.7m)	Sales €500–999m ($552–1102m)
€61.5m ($67.8m)	Sales €1,000–4,999m ($1,103–5,514m)
€283.3m ($312.5m)	Sales >€5,000m (>$5,515m)

▲ Average sales volume forecast and replenished by one FTE by company size

We measured retailers' efficiency by dividing their sales by the number of Full Time Equivalent (FTE) employees they have working on replenishment and forecasting. For some retailers this was an easy enough number to provide, the people work in a separate team and are easily identifiable. In other companies the tasks of forecasting and replenishment are carried out in store or shared by a number of different job functions including buying, merchandising and logistics.

On average one FTE carries out the forecasting and replenishment for €172.2 million ($189.9m) of merchandise. Economies of scale apply, so this figure rises significantly for retailers with sales exceeding €5 billion ($6bn), when one FTE can manage €283.3 million ($312.5m) of goods. But it is not until you get to more than €1 billion ($1bn) of sales that these cost savings become apparent. The smallest retailers we interviewed are much less efficient – one FTE works on only €23.6 million ($26m) of product.

€172.2m ($189.9m)	All retailers
€244.7m ($269.9m)	North America
€98.2m ($108.3m)	Germany
€85.3m ($94m)	Nordics
€73.2m ($80.7m)	UK
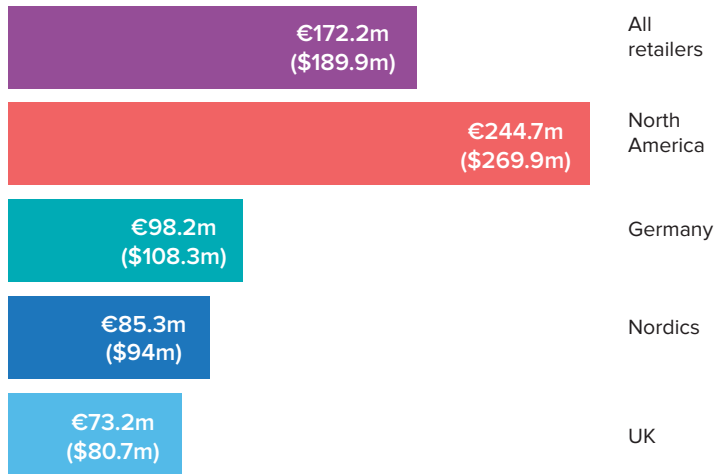
▲ Average sales volume forecast and replenished by one FTE by country

The country results reflect these economies of scale too. North America is much more efficient than the other countries studied with an average of €244.7 million ($269.9m) of products per FTE compared to the average of €172.2 million ($189.4). US retailers tend to be much larger than those in Europe so these differences are a result of size rather than geography. In this study the average US retailer has sales of €9.4 billion ($10.4bn) compared to the European average of €2.6 billion ($2.9bn).

If we analyse the results by retail sector then there are some significant differences. Food and drug retailers are most efficient with one FTE responsible for forecasting and replenishing €301.9 million ($333m) of products. These retailers tend to have lower profit margins than most other sectors so need to be more efficient. There is not much difference among the other retail sectors which range from an average of €116.5 million ($128.5m) per FTE for small format speciality retailers to €92.4 million ($101.9m) per FTE for mass merchants and department stores.

€172.2m ($189.9)	All retailers
€301.9m ($333m)	Food and drug
€116.5m ($128.5m)	Small format speciality
€92.9m ($102.5m)	Large format speciality
€92.4m ($101.9m)	Mass merchants and department stores
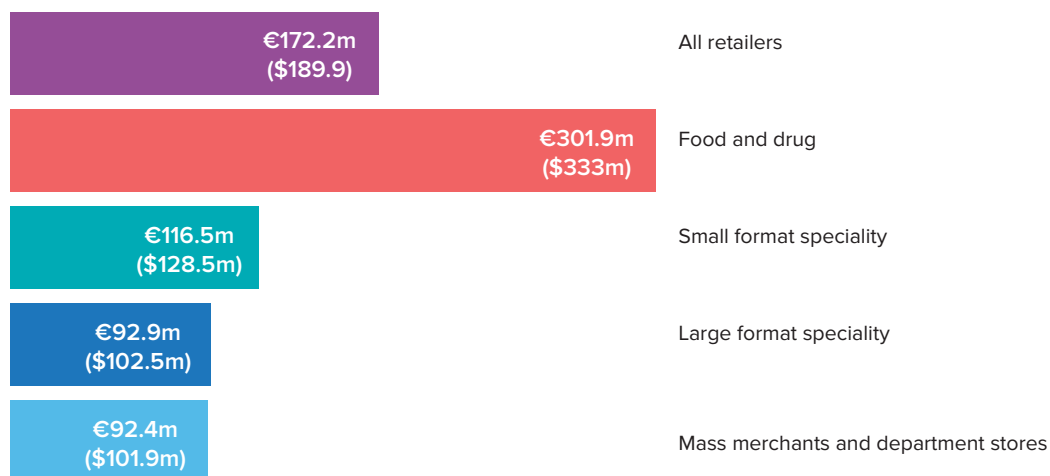
▲ Average sales volume forecast and replenished by one FTE by retail sector

Time Taken for Reporting

We asked retailers about how long it took them to prepare a report on product availability and inventory turnover for an item in all the warehouse and store locations in the business. The results are quite horrifying with people taking an average of 79 minutes to prepare a standard report and 110 minutes to prepare an ad hoc report. This length of time seriously impacts on people's productivity – more time is spent on producing reports than using them.

If we look at the differences by retail sector mass merchants and department stores take the longest but these retailers tend to have the greatest number of SKUs in their business. For these retailers it takes an average of 116 minutes to prepare a standard report and 167 for an ad hoc report. Large format speciality retailers spend least time in reporting – an average of 54 and 46 minutes. This is probably more to do with better systems for this retail sector than significant differences by sector.

▼ Average time taken to prepare reports on product availability and inventory turnover for an item in all the warehouse and store locations in the business by retail sector

All retailers
- 79 min (STANDARD REPORT)
- 110 min (AD HOC REPORT)

Mass merchants and department stores
- 116 min (STANDARD REPORT)
- 167 min (AD HOC REPORT)

Small format speciality
- 92 min (STANDARD REPORT)
- 129 min (AD HOC REPORT)

Food and drug
- 62 min (STANDARD REPORT)
- 105 min (AD HOC REPORT)

Large format speciality
- 54 min (STANDARD REPORT)
- 46 min (AD HOC REPORT)

■ STANDARD REPORT
■ AD HOC REPORT

Single Stock Pool for All Sales Channels

No, separate stock pools for each sales channel 14%

Plan to 5%

Yes 37%

No, separate stock pools for each warehouse 20%

Only have one sales channel 24%

▲ Single stock pool for all sales channels

Holding stock across a number of locations inevitably involves holding more stock than if you have a single stock pool across all sales channels. So we asked our retailers how close they are to this ideal of a single stock pool across all sales channels.

Over a third of retailers interviewed (37%) already have a single stock pool across all sales channels. This was higher than we had anticipated and shows that the retail industry is moving towards a single stock pool quite quickly. Almost a quarter (24%) only have one sales channel anyway. 14% of retailers interviewed have separate stock pools for each sales channel, generally because of systems or physical constraints that currently stop them doing this. 20% have separate stock pools for each of their distribution centres, rather than holding stock by sales channels.

"We treat online as another store so it has its own stock pool."
Supply Chain Director, Small Format Speciality Retailer

"It's a hybrid, we have transparency of stock across the channels but choose to make store stock available to online customers but stock in the retail warehouse is not available to online customers."
Logistics Director, Department Store Retailer

"Big box and Mall Store stock are currently separate from eCommerce; the aim is to move into wider GM categories and that brings complexity."
Supply Chain Director, Small Format Speciality

"We have a separate stock pool for stores and e-commerce, but we plan to have a single stock pool within 2 years."
COO, Small Format Speciality Retailer

"At the DC level it is one stock pool but online is separate and there are no transfers from store to store. We are thinking about different options to get to a single stock pool or at least change the way we do things now."
Development Director, Food and Drug Retailer

"We have aspirations to do so, at the moment it depends on the product, e.g. for food we pick from store but have some dark stores. It's evolving but at the moment it is in separate stock pools for each sales channel."
Operations and Logistics Director, Food and Drug Retailer

43%	All retailers
56%	Large format speciality
52%	Mass merchants and department stores
44%	Small format speciality
20%	Food and drug
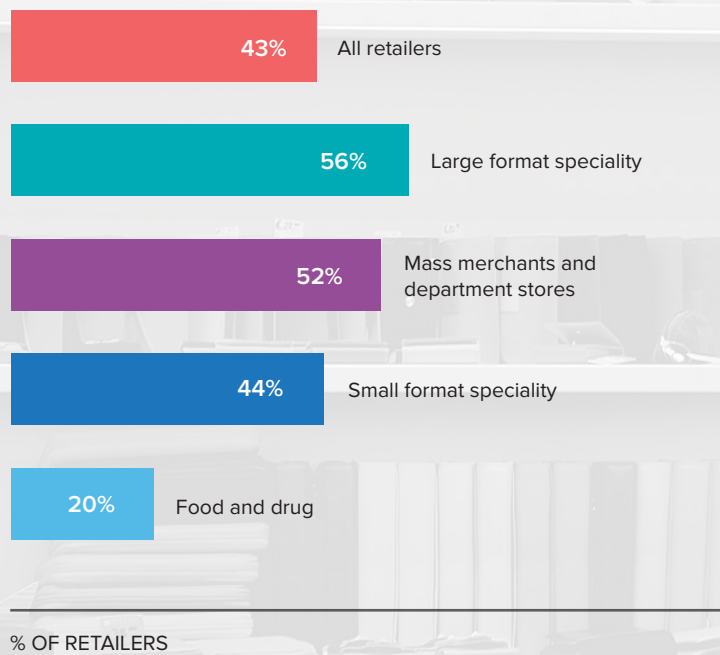
% OF RETAILERS

▲ Percentage of omni-channel retailers operating a single stock pool by retail sector

We drilled down on the detail by retail sector and analysed only those retailers with more than one sales channel. This shows that from this base 43% of retailers operate a single stock pool across all channels, so this is now almost the norm. Results vary by retail sector. Only 20% of food and drug retailers operate a single stock pool. This is because local stores are more likely to act as the stock pool for the local area. Large format speciality retailers are most likely to operate a single stock pool across all channels than any other sector with 56% already functioning in this way. This is followed closely by mass merchants and department stores with 52%. In the case of many non-food products the reduction in lost sales is very significant when operating this way. The vast numbers of SKUs needed when offering a range of sizes and colours makes the benefit in improved availability significant.

43%	All retailers
52%	Sales <€500m (<$552m)
11%	Sales €500–999m ($552–1102m)
43%	Sales €1,000–4,999m ($1,103–5,514m)
40%	Sales >€5,000m (>$5,515m)

% OF RETAILERS

▲ Percentage of omni-channel retailers operating a single stock pool across sales channel by company size
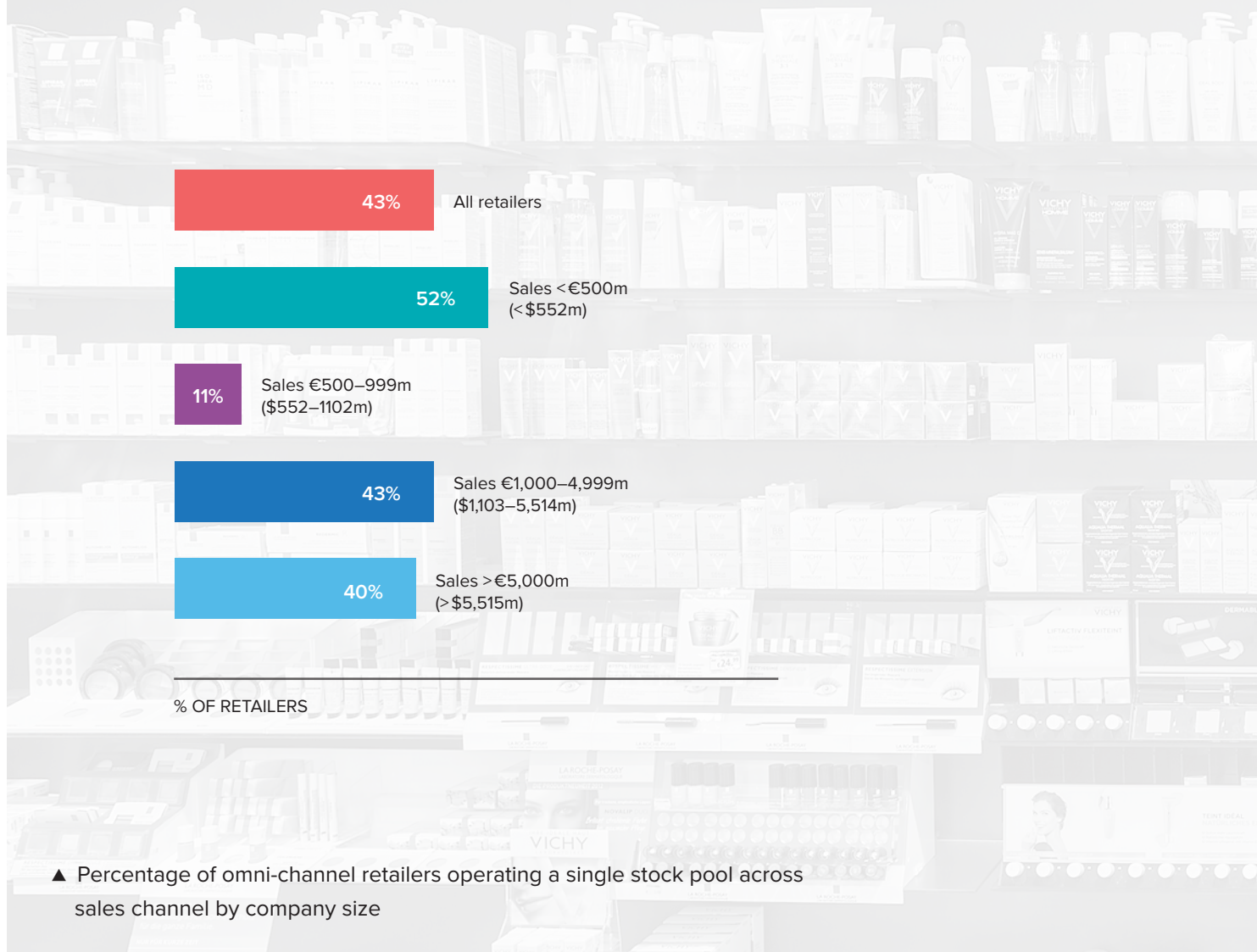
If we analyse the results by size of company it seems that smaller and larger retailers are more likely to operate a single stock pool compared to middle sized companies. So 52% of those with sales of less than €500 million ($552m) have a single stock pool and 43% of those with sales from €1–5 billion ($1–6bn) and 40% of those with sales of over €5 billion ($6bn) have a single stock pool. While those retailers in the middle with sales of €500 to 999 million ($1102m) are much less likely to have a single stock pool – only 11% in this size band. For smaller retailers with a small online presence a single stock pool is not that difficult to achieve, even if it needs some manual intervention. For larger retailers the benefits of a single stock pool are very significant in terms of better customer service and reduced working capital costs so these larger retailers have a genuine incentive to make it work.
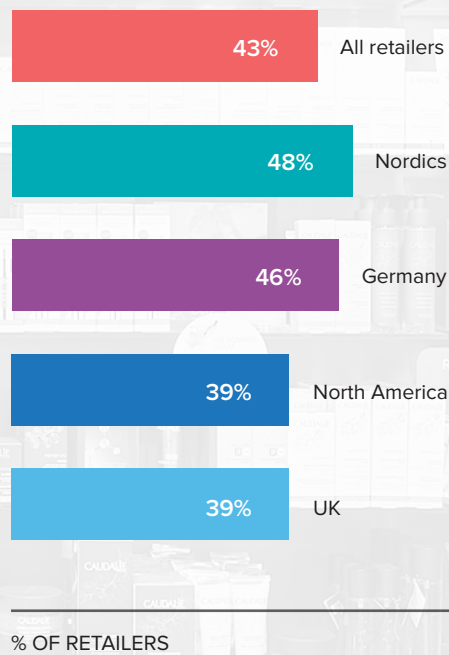
43%	All retailers
48%	Nordics
46%	Germany
39%	North America
39%	UK

% OF RETAILERS

▲ Percentage of omni-channel retailers operating a single stock pool across all sales channels by country

There are less marked differences by country although it should be noted that the percentage of retailers in the UK operating a single stock pool has dropped from 54% last year to 39% this year. However we believe that some retailers that reported a single stock pool last year were rather exaggerating the reality. (We believe that some retailers thought that a single warehouse stock pool was a single stock pool and they could ignore store stocks. More retailers have probably moved to the wider view now).

It is worth pointing out that when we asked retailers about their top three business challenges implementing a single stock pool was mentioned by 15% - the seventh on the list of challenges and an unprompted answer.

Integration of Store Replenishment and DC Replenishment

We assessed the level of integration between store replenishment and DC replenishment by asking retailers how quickly are store demand plan changes seen in DC replenishment requirements. Most retailers see this the next day (53%), with some getting better results within hours (20%) and in near real time (15%). A significant 12% never see store demand plan changes in DC replenishment requirements.

The results are fairly similar for the speed with which store stock replenishment plan changes are seen in DC replenishment requirements. The biggest group (56%) see this the next day, 17% in hours and 15% in near real time. Very few retailers have systems which can react in real time or near real time.

▼ Integration of store replenishment and DC replenishment – all retailers

How quickly are store demand plan changes seen in DC replenishment requirements?

Never 12%
Near real time 15%
In hours 20%
Next day 53%

How quickly are store stock replenishment plan changes seen in DC replenishment requirements?

Never 12%
Near real time 15%
In hours 17%
Next day 56%
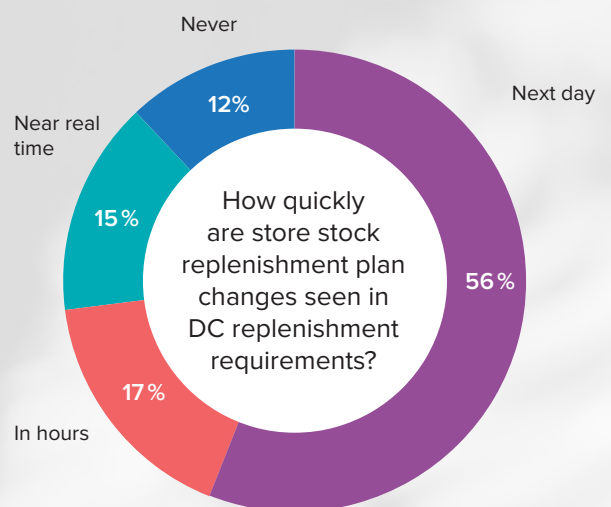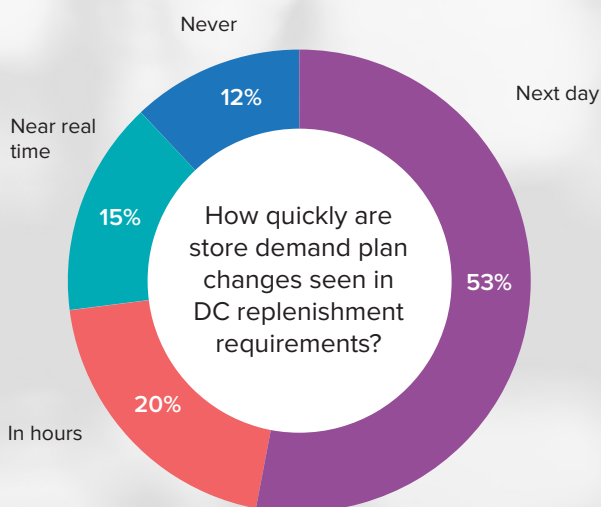
Analysis and Reporting on Supply Chain

We have already discovered that retailers take a long time to get basic reports from their system so we asked about key capabilities of the reports retailers can access in their companies. The majority of retailers can calculate the total inventory for single items across the entire replenishment network (70% with a further 19% able to do this partially). But this is a pretty basic requirement for a serious supply chain professional so we pity the 11% of retailers that cannot do this at all – hard for them to compete.

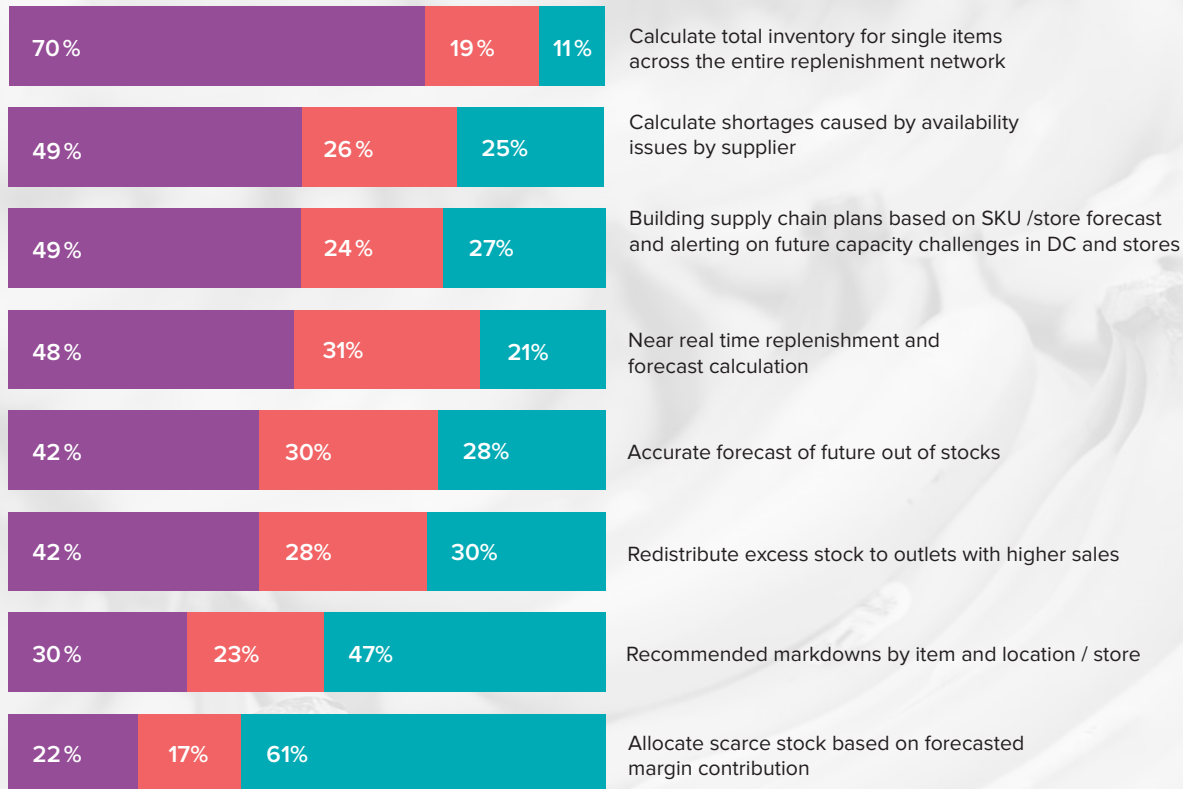We also asked about a number of other reasonable requests of a supply chain system and less than half the retailers interviewed could carry them out. These include allocating scarce stock based on forecasted margin contribution (only 22% can do this), recommended markdowns by item and location / store (only 30% can do this), accurate forecast of future out of stocks and the ability to redistribute excess stocks to outlets with higher sales (only 42% can do each of these).

In fact many of the retailers we interviewed can only perform very basic analysis using their supply chain systems, although about a third of the companies could do a partial analysis of the tasks we asked about. In these cases there was some requirement to put information into a spreadsheet and do some extra analysis or it was not available for all product groups or sales channels.

▼ Analysis and reporting on supply chain – all retailers

Metric	Can do	Can do partially	Cannot do	Description
	70%	19%	11%	Calculate total inventory for single items across the entire replenishment network
	49%	26%	25%	Calculate shortages caused by availability issues by supplier
	49%	24%	27%	Building supply chain plans based on SKU /store forecast and alerting on future capacity challenges in DC and stores
	48%	31%	21%	Near real time replenishment and forecast calculation
	42%	30%	28%	Accurate forecast of future out of stocks
	42%	28%	30%	Redistribute excess stock to outlets with higher sales
	30%	23%	47%	Recommended markdowns by item and location / store
	22%	17%	61%	Allocate scarce stock based on forecasted margin contribution

% OF RETAILERS

■ CAN DO WITH CURRENT SYSTEM

■ CAN DO PARTIALLY WITH CURRENT SYSTEM

■ CANNOT DO

▼ Analysis and reporting on supply chain — food and drug retailers

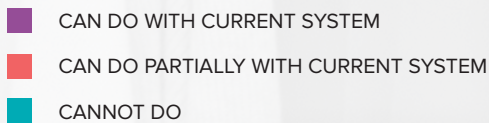|			
62%	**17%**	**21%**	Calculate total inventory for single items across the entire replenishment network
52%	**14%**	**34%**	Calculate shortages caused by availability issues by supplier
62%	**10%**	**28%**	Building supply chain plans based on SKU /store forecast and alerting on future capacity challenges in DC and stores
45%	**31%**	**24%**	Near real time replenishment and forecast calculation
41%	**28%**	**31%**	Accurate forecast of future out of stocks
28%	**24%**	**48%**	Redistribute excess stock to outlets with higher sales
39%	**21%**	**40%**	Recommended markdowns by item and location / store
11%	**17%**	**72%**	Allocate scarce stock based on forecasted margin contribution

% OF RETAILERS

- ▮ CAN DO WITH CURRENT SYSTEM
- ▮ CAN DO PARTIALLY WITH CURRENT SYSTEM
- ▮ CANNOT DO

▼ Analysis and reporting on supply chain small format speciality retailers

55%	**36%**	**9**	Calculate total inventory for single items across the entire replenishment network
37%	**36%**	**27%**	Calculate shortages caused by availability issues by supplier
18%	**36%**	**46%**	Building supply chain plans based on SKU /store forecast and alerting on future capacity challenges in DC and stores
45%	**36%**	**19%**	Near real time replenishment and forecast calculation
37%	**36%**	**27%**	Accurate forecast of future out of stocks
37%	**45%**	**18%**	Redistribute excess stock to outlets with higher sales
18%	**9%**	**73%**	Recommended markdowns by item and location / store
27%	**9%**	**64%**	Allocate scarce stock based on forecasted margin contribution

▼ Analysis and reporting on supply chain – large format speciality retailers

72%	21%	7	Calculate total inventory for single items across the entire replenishment network
61%	21%	18%	Calculate shortages caused by availability issues by supplier
47%	39%	14%	Building supply chain plans based on SKU /store forecast and alerting on future capacity challenges in DC and stores
50%	32%	18%	Near real time replenishment and forecast calculation
46%	32%	22%	Accurate forecast of future out of stocks
63%	19%	18%	Redistribute excess stock to outlets with higher sales
25%	21%	54%	Recommended markdowns by item and location / store
28%	18%	54%	Allocate scarce stock based on forecasted margin contribution

The main differences by retail sector are that small format speciality retailers have the poorest systems, for each reporting capability we look at a smaller percentage of small format speciality retailers are able to perform it than for any other sector. The most notable deficiency is for building supply chain plans based on SKU / store forecasts and alerting on future capacity challenges in DC and stores, only 18% of these retailers can do this compared to 49% of all retailers. This is mainly because most fashion retailers receive goods from overseas on long lead times and have less visibility of where goods actually are in the supply chain.

▼ Analysis and reporting on supply chain – mass merchants and department store retailers

88% 6 6	Calculate total inventory for single items across the entire replenishment network
34% **44%** **22%**	Calculate shortages caused by availability issues by supplier
50% **17%** **33%**	Building supply chain plans based on SKU /store forecast and alerting on future capacity challenges in DC and stores
50% **28%** **22%**	Near real time replenishment and forecast calculation
39% **28%** **33%**	Accurate forecast of future out of stocks
39% **39%** **22%**	Redistribute excess stock to outlets with higher sales
33% **39%** **28%**	Recommended markdowns by item and location / store
28% **22%** **50%**	Allocate scarce stock based on forecasted margin contribution

% OF RETAILERS

■ CAN DO WITH CURRENT SYSTEM

■ CAN DO PARTIALLY WITH CURRENT SYSTEM

■ CANNOT DO

Department store retailers and mass merchants have the best capabilities of all the retail sectors and more retailers can carry out the analyses we asked about. In particular 88% can calculate total inventory for single items across the entire replenishment network (compared to 70% for all retailers). The more complicated business and large numbers of SKUs means that is more likely to be a priority for this type of retailer when selecting or developing their systems.
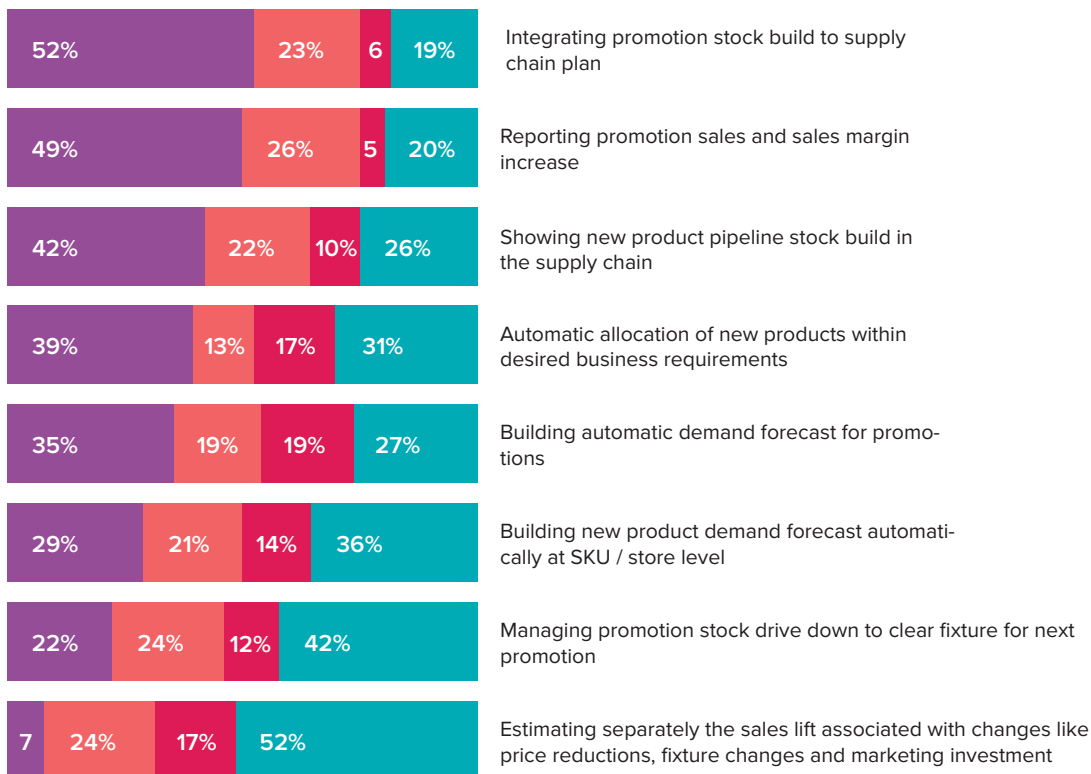
Not surprisingly food retailers are less likely to be able to allocate scarce stock based on forecasted margin contribution – generally food items are not in short supply compared to non-food. They are also less likely to be able to redistribute excess stock to outlets with higher sales than their non-food counterparts – again an unlikely scenario for perishable products. In fact large format speciality retailers are most likely to be able to redistribute excess stock to outlets with higher sales (63% can do this vs an average of 42%) because this is the sector where this is most useful.

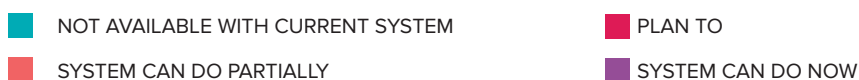# Systems Capabilities Regarding Promotions and New Product Introductions

Handling promotions effectively is an issue for 31% of retailers so we asked about the systems capabilities regarding promotions and also new product introductions. There is a significant level of activity in this area with 5–19% of retailers planning to add capabilities to their current systems. Automating key processes is a priority and we have seen that this is a key motivation for replacing systems. Currently 39% of retailers have automatic allocation of new products but 17% plan to add this capability. Similarly 35% can currently build automatic demand forecasts for promotions with a further 19% planning to add this capability.

Being able to run promotions that do not run out of stock or end when you are overstocked is a tricky act to manage and automation of key processes helps reduce stock holding while maintaining availability.

▼ Systems capabilities regarding promotions and new product introductions – all retailers

52%	23%	6	19%	Integrating promotion stock build to supply chain plan
49%	26%	5	20%	Reporting promotion sales and sales margin increase
42%	22%	10%	26%	Showing new product pipeline stock build in the supply chain
39%	13%	17%	31%	Automatic allocation of new products within desired business requirements
35%	19%	19%	27%	Building automatic demand forecast for promotions
29%	21%	14%	36%	Building new product demand forecast automatically at SKU / store level
22%	24%	12%	42%	Managing promotion stock drive down to clear fixture for next promotion
7	24%	17%	52%	Estimating separately the sales lift associated with changes like price reductions, fixture changes and marketing investment

% OF RETAILERS

- NOT AVAILABLE WITH CURRENT SYSTEM
- PLAN TO
- SYSTEM CAN DO PARTIALLY
- SYSTEM CAN DO NOW

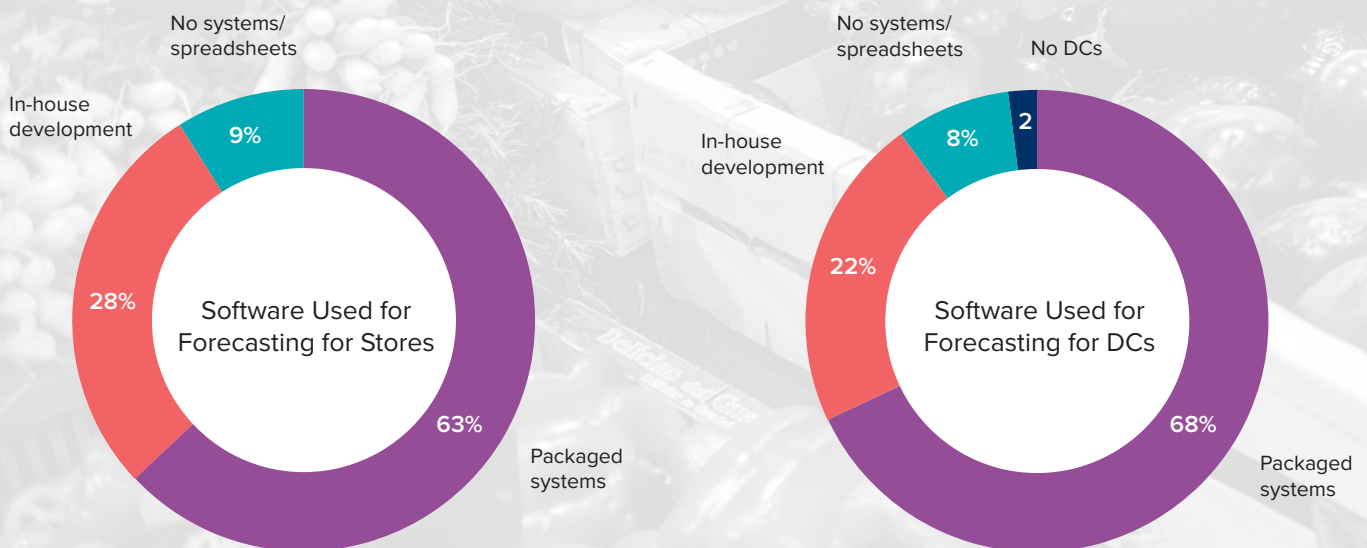# Supply Chain Planning and Execution Systems

FORECASTING SYSTEMS

The majority of retailers use the same system for forecasting as for replenishment. Considering we interviewed retailers with sales over €100 million ($110m) it is surprising that 9% of retailers use no systems at all or just spreadsheets for forecasting for stores and 8% use no systems at all for forecasting for DCs. This helps explain why many of the forecasting challenges we raised are very real for these companies who rely mainly on guesswork and intuition.

In-house developed systems are very popular too, used by 28% of retailers for forecasting for stores and 22% of retailers for forecasting for DCs. Some of these in-house developed systems may be little more than spreadsheets, although of course some are very sophisticated and tailored to the retailer's precise requirements. A lot of retailers replenish stores using Min/Max or sell one get one models and these mean that forecasting is not needed at store level. However, these don't work nearly so well for the faster moving lines, only for the slow ones.

The majority of retailers use packaged systems – 63% for forecasting for stores and also 68% for forecasting for DCs.

▼ Forecasting systems

Software Used for Forecasting for Stores

- No systems/spreadsheets: 9%
- In-house development: 28%
- Packaged systems: 63%

Software Used for Forecasting for DCs

- No systems/spreadsheets: 8%
- No DCs: 2
- In-house development: 22%
- Packaged systems: 68%
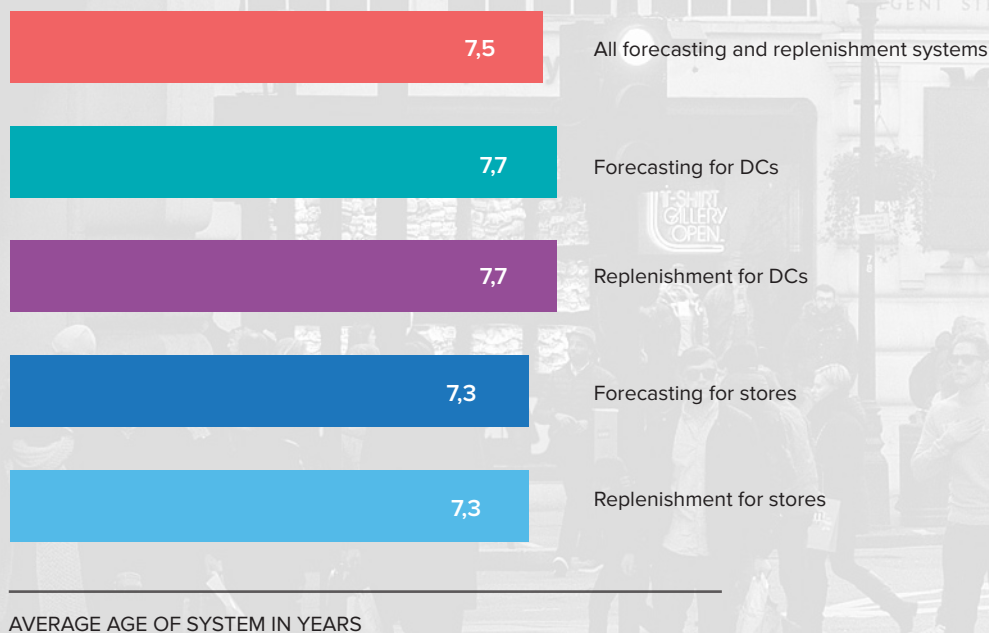
REPLENISHMENT SYSTEMS

Slightly fewer retailers use no systems or spreadsheets for replenishment for stores and for replenishment to DCs compared to forecasting systems, the figures are 5% and 3% respectively. This indicates that replenishment is taken more seriously than forecasting or at least it is the process that is automated first. In-house developed systems are again important – used by 33% for replenishment for stores and 28% for replenishment for DCs.

But packaged systems dominate, used by 62% for replenishment for stores and 67% for replenishment for DCs.

▼ Replenishment systems

No systems/
spreadsheets

In-house
development

5%

33%

Software Used
for Replenishment
for Stores

62%

Packaged
systems

No systems/
spreadsheets

No DCs

In-house
development

3   2

28%

Software Used for
Replenishment for DCs

67%

Packaged
systems

7,5	All forecasting and replenishment systems
7,7	Forecasting for DCs
7,7	Replenishment for DCs
7,3	Forecasting for stores
7,3	Replenishment for stores
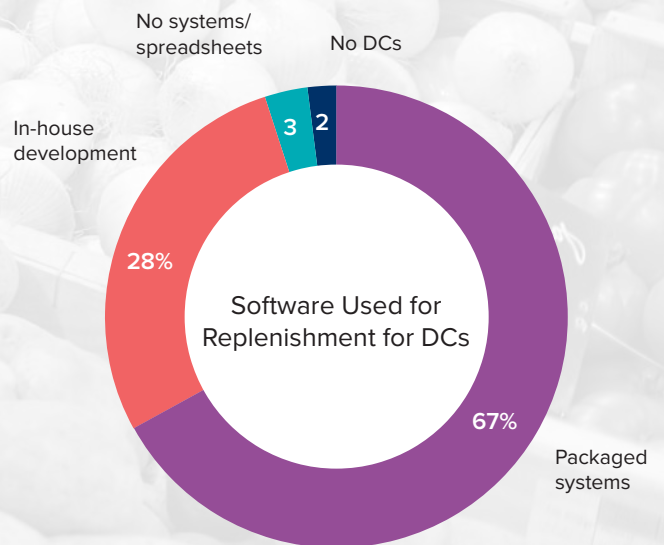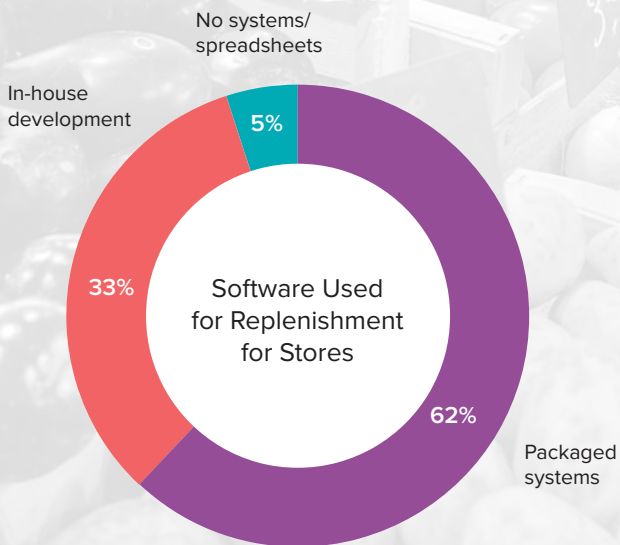
AVERAGE AGE OF SYSTEM IN YEARS

AGE OF REPLENISHMENT AND FORECASTING SYSTEMS

The average age of replenishment and forecasting systems is 7.5 years. So retailers tend to keep their systems for quite some time. However, Martec's research for the IT in Retail report shows that this is not an unusually long time to keep systems though. There is very little difference between forecasting and replenishment systems – mainly because for most retailers they are the same system. Forecasting and replenishment systems for DCs are the oldest at 7.7 years each. This is followed by systems to forecast and replenish for stores at 7.3 years.

16%	4%	Forecasting for stores
17%	2%	Forecasting for DCs
17%	2%	Replenishment for stores
18%	2%	Replenishment for DCs

■ % OF RETAILERS PLANNING TO IMPLEMENT SYSTEMS

■ % OF RETAILERS PLANNING TO REPLACE SYSTEMS

REPLACEMENT AND IMPLEMENTATION PLANS

Against the background of systems that are over 7 years old it is not too surprising to find that there are a lot of replacement plans in place. This chart shows high levels of replacement plans for all supply chain systems, with about a fifth of companies planning to replace or implement for the first time. And there are only minor differences between the four different types of system we are studying. It is worth noting that 4% of companies are planning to implement systems for forecasting for stores for the first time with another 16% looking to replace existing systems. This is in contrast to only 2% planning to implement replenishment for stores and DCs and forecasting for DCs for the first time.

Retailers told us that these replacement plans are all in the next 18 months; however experience tells us that it is likely that these timelines will probably slip.

"We are doing well and growing a lot at the moment so we need a system that will allow us to grow, it is creaking a bit at the moment, but it needs to help us do deals and respond quickly. We must do something in the next 1 to 3 years."

Head of Sales and Marketing,
Drug Store Retailer

"All our systems were in Excel and Access before so we wanted automation, less Excel, less of things in people's heads that go when they leave and the ability to scale up without recruiting more people."

Operations Director,
Large Format Speciality Retailer

"We plan to replace our systems because our old one does not support omni-channel and can't cope with our growth."

Stock Distribution Controller,
Small Format Speciality Retailer

"We are planning to replace our systems to get a more joined up system so we can make better decisions and have one version of the truth. At the moment someone has to do a report and send it to someone else, they have to read it and so things don't get done."
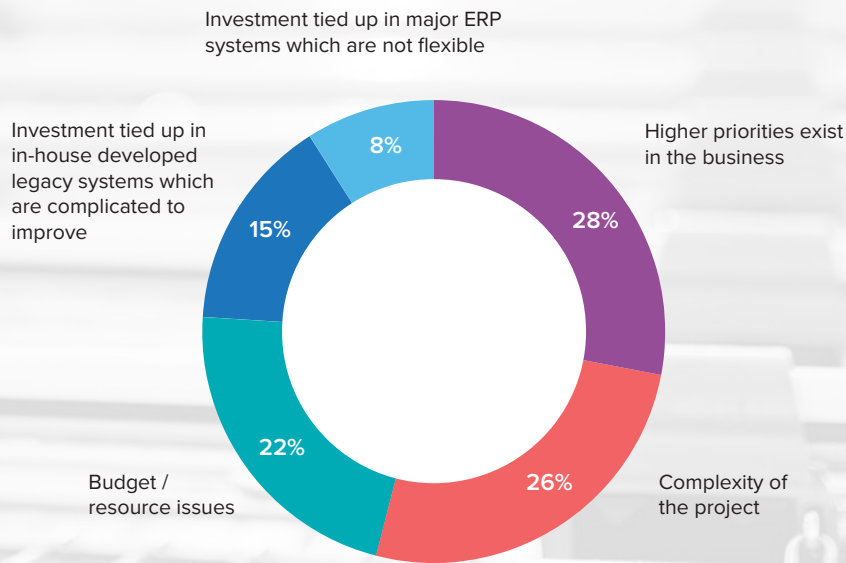
Logistics Director,
Department Store Retailer

REASONS FOR INVESTING IN NEW SYSTEMS

Of the retailers with plans to invest in new systems or who have recently acquired new systems the two main reasons are that they had outgrown the old system and that supply chain teams spend too long data crunching (both 18% of retailers). Outgrowing a system is often because the system cannot handle international expansion or an increase in store numbers or product lines. Older systems are not designed for an omni-channel world and some retailers had to replace systems that couldn't cope with their online expansion. The amount of time supply chain teams spend making good decisions, rather than data gathering and cutting and pasting into spreadsheets is also a crucial reason to replace old systems. The improvement in morale and decision making is significant.

▼ Reasons for investing in new systems

Not specified / known — 39%
Old system couldn't cope with growth — 18%
Spent too long data crunching — 18%
To increase availability and reduce stock holding — 15%
Old system can't cope with multi-channel — 5%
So we can forecast at SKU and store level — 5%

Investment tied up in major ERP
systems which are not flexible

Investment tied up in
in-house developed
legacy systems which
are complicated to
improve

8%

15%

28% Higher priorities exist
in the business

22%

26% Complexity of
the project

Budget /
resource issues

▲ Reasons for not investing in systems

REASONS FOR NOT INVESTING IN NEW SYSTEMS

Of the retailers with no replacement plans for their supply chain systems
the top two reasons are higher priorities exist in the business (28%) and
also the complexity of the project (27%). There has been a lot of pent
up demand for retail investment and so there are a number of projects
that may be hindering supply chain system replacements – opening new
stores, other sales channels or other systems investments for example.
What is most surprising about this list is that budget / resource issues
only come in third – normally cost issues come in first or second.

The pain and cost of replacing replenishment and forecasting systems
are the key reasons for most retailers still using older systems. Retailers
who use in-house developed and ERP systems are most likely to perceive
that it will be complex to replace them. In fact most modern solutions do
not take as long or involve as much complexity as old fashioned systems
did. When you look at the reasons not to replace old systems all of them
actually do want to replace them but there are barriers or reasons they
cannot. No-one says that the old system works and is cost effective.

Benchmark for Retail Supply Chain and Execution

The research enabled us to put together a benchmark for retail supply chain and execution. This benchmark is designed to be used by retailers as a guide to understanding how their business compares with other retailers. We have defined 4 levels:

LEVEL 1.0 TRADITIONAL

Retailers at this entry stage operate basic processes, with little system support. Replenishment is usually store based and there are a number of different stock pools in the business, so they are usually overstocked with lower than average stock turns for their sector. Forecasting is generally a manual process. There is no formal supplier management, monitoring or collaboration. Reporting is poor and time consuming.

LEVEL 2.0 STANDARD

Retailers at the standard level have started to automate, but there are still a number of basic, manual processes and systems in the business. There is variable visibility of the supply chain. Stock holding can be high and is not optimized across all sales channels.

LEVEL 3.0 ADVANCING

More modern forecasting and replenishment processes and systems are in evidence at this stage, with centralised, automated replenishment. Store and DC replenishment is becoming more integrated. There is a move towards a single stock pool across all sales channels. Supply chain team members spend more of their time making forecasting and replenishment decisions than data crunching.

LEVEL 4.0 AGILE

Availability and stock turns are higher than average for the sector. Integrated, omni-channel systems automate the forecasting and replenishment process. The supply chain is completely visible. Store and DC replenishment is completely integrated. There is a high and constructive level of supplier collaboration and management. Promotions are managed effectively in terms of stock and availability.

HOW TO USE THE BENCHMARK GRID

The light blue boxes show the benchmark or average performance of the retailers that took part in this research. For the majority of processes the average performance is level 2.0 or standard. It is only for replenishment and stock management that the average was higher at 3.0 or advancing.

If you have participated in the research you will receive your personalised benchmark to show how you compare to the rest of the industry. This will show you where you perform better than the industry and some suggested areas to improve.

If you have not taken part in the research but would like to benchmark your business, you can use this as a framework for benchmarking.

Of course there will be some quite understandable differences in performance depending on the exact nature and culture of the business, trading formats, sales channels and so on. So this is intended more as a guide to show you where to focus effort and investment, rather than a hard and fast rule.

We suggest the following approach for improvement of your supply chain planning and execution processes:

1. Take your personalised benchmark and identify the areas where your company performs below average. These are the areas to tackle first. By studying the next box along to the right you can see what a realistic goal for improvement is. In some cases you may be able to leap frog a stage for significant performance advances.

2. Look at the areas where you are ahead of your competitors. Are you really making the most of this competitive advantage? It won't last for long.

3. Where your performance is average, take a look at the next column along to the right and see which of these areas are ones where you feel you will get most benefit from improving. The market is moving on, so you should too!

Benchmark out of 4.0	1.0 Traditional	2.0 Standard	3.0 Advancing	4.0 Agile
Forecasting	Manual process only Poor promotional, short life products and special event forecasting	Mostly manual process Not very reactive to changing events	Forecasting becoming more automated and effective Forecast all lines at DC level	Efficient process with few problems Forecast fast movers at store/SKU Forecasts include weather impact
Replenishment	Store and DC replenishment separate or no central replenishment at all Basic replenishment, e.g. Min/Max, 1 for 1 Poor product introductions and terminations	Store and DC replenishment with some integration Mostly basic, heavily manual replenishment	Store and DC replenishment becoming more integrated Replenishment becoming more automated and effective	Store and DC replenishment totally integrated Sophisticated effective replenishment process Availability high
Stock management	Overstocked with a number of separate stock pools for sales channels and / or DCs	Use a number of different stock pools but attempting to reduce stock holding and manage this better	Moving towards one stock pool across all sales channels	One stock pool across all sales channels and high stock turns for your sector
Visibility of supply chain	No visibility of the supply chain	Variable visibility by supplier and sales channel	Mostly visible, with some exceptions	Fully visible from end to end including in transit, future stock levels and staffing requirements in the DC. Ability to see promo stock availability.
People	Spend their time gathering information and cutting and pasting rather than decision making Each person in supply chain team responsible for managing lower than average sales for your segment.	A lot of cutting and pasting of information and data manipulation but some time available to make decisions Each person in supply chain team responsible for sector standard replenishment volume	Processes becoming more automated so better quality decision making is emerging Each person in supply chain team responsible for more than sector standard sales volume	Automated processes so majority of time is spent on decision making rather than data gathering Each person in supply chain team responsible for managing higher than average sales for their sector.
Reporting	Standard stock reports take 2 hours or more to produce, even standard reports Difficult to get information to run and monitor promotions effectively	Reports take 1–1.5 hours to produce Basic promotion reporting available	Reports take 0.5 to 1 hour to produce Most reporting available on promotions	Reports take less than half an hour to produce and are usually "press of a button" Reporting available on all key aspects of promotion build, end and evaluation
Technology	Mainly spreadsheets linked to legacy systems Different systems for each sales channel or no real supply chain systems at all	Use older systems for supply chain processes supplemented by spreadsheets Not many systems are truly multi-channel Online fulfilment done from central warehouse(s) for click and collect.	Modern forecasting and replenishment systems Little use of spreadsheets Most systems can cope with omni-channel retailing	Integrated systems to optimize forecasting and replenishment processes Systems designed for omni-channel retailing Can fulfil online orders from stores if appropriate

Survey Methodology and Research Criteria

The results of this supply chain planning and execution research are based on 126 interviews across North America (Canada and US), Germany, UK and Nordics (defined as Denmark, Finland, Norway and Sweden). All the respondents were at the director, controller or managerial level. The interviews were conducted from January to March 2016 among retailers with sales exceeding €100 million ($110m). The sales of these companies total €551 billion ($608m). The sales of the retailers interviewed in each country represent the following share of their country's total retail sales:

Denmark 35%
Finland 36%
Germany 23%
Norway 21%
North America 2%
Sweden 4%
UK 28%

So it is a very representative sample. The average sales of the companies interviewed is €4.4 billion ($4.8bn).

## RETAILERS INTERVIEWED BY COUNTRY

This survey covers North America and Northern Europe. The break down by the number of interviews is as follows:

34% are from Germany

North America including US and Canada is 26%

21% are UK based companies

Nordics, including Denmark, Finland, Norway and Sweden account for 19% of the total.

▼ Retailers interviewed by country
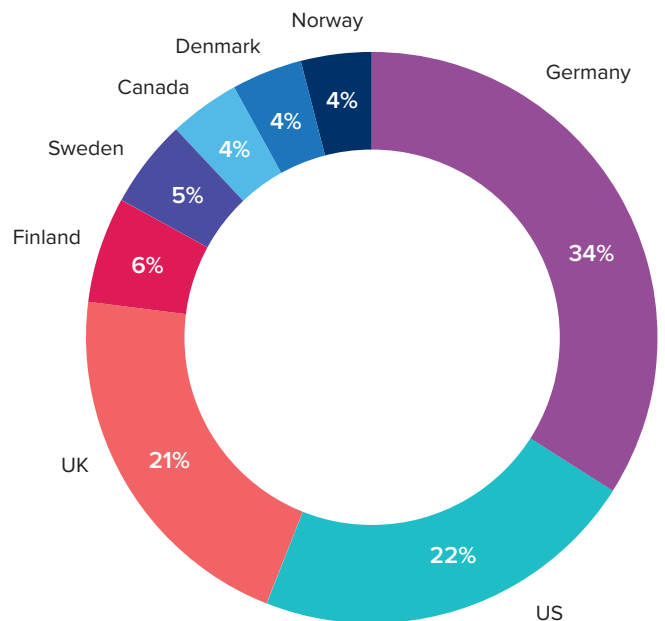
▼ Executives interviewed by job function
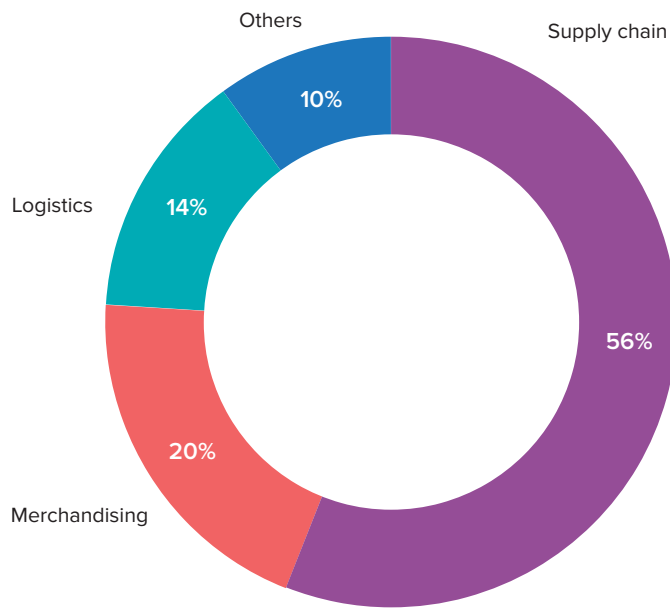
RESPONSIBILITY OF PEOPLE INTERVIEWED

The respondents are senior executives who are responsible for supply chain planning and execution across the business.

63% are Vice Presidents, directors, department heads or controller level executives. The rest are senior managers.
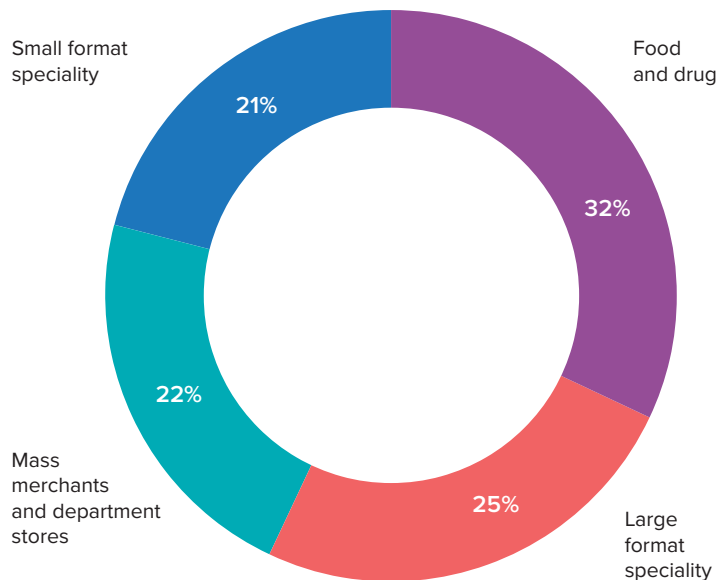
The majority, 56% are supply chain directors or executives

20% are merchandising directors or executives.

14% are logistics directors or executives.

10% are in other job functions including operations, finance and IT.

▼ Retailers interviewed by sector

COMPANIES INTERVIEWED BY SECTOR

This survey covers all retail sectors. They comprise:

32% food and drug retailers including supermarkets, cash and carry, convenience stores, chemists and drug stores.

25% large format speciality retailers including DIY, motoring, garden centres and electrical retailers.

22% mass merchants – retailers selling a wide range of different products including discounters and departments store retailers.

21% small format speciality retailers including clothing, shoes, accessories, books and toy retailers.

About RELEX Solutions

RELEX provides solutions for retailers, wholesalers and manufacturers to optimize their supply chains. RELEX's advanced forecasting and replenishment software – complete with cutting-edge automation tools – cuts spoilage, decreases inventory, and boosts on-shelf availability, saving tens of millions of euros and improving sales, profits and customer satisfaction.

RELEX's proprietary database has made in-memory calculation a game-changing reality, delivering results from big data more than 100 times faster than traditional options; underpinning our actionable analytics, real time visibility, 'what if?' scenario testing and much more. Cloud-based and quick to implement with transparent SaaS pricing and a rapid return on investment, it gives customers the power to adjust and reconfigure their systems completely independently.

Founded in 2005 by a group of leading logistics scientists from Helsinki University of Technology, RELEX is fast becoming established as the first choice of retailers and manufacturers across Northern Europe. RELEX has been the top ranked supply chain technology company in Deloitte's prestigious Fast 500 (EMEA) list of the fastest growing tech companies five years in a row. The company employs close to 200 people at its offices in the UK, Germany, Sweden, Norway, Denmark, Italy, US and at its Helsinki headquarters in Finland.

We are pleased to include some of Europe's most respected retailers and wholesalers amongst our customers including "3", AO.com, Booths, Plantasjen, Stockmann, Byggmax, Majestic Wine, Marimekko, Rossmann and many more.

For more information:
www.relexsolutions.com

WHAT OUR CUSTOMERS SAY

"The real revelation was how completely invested RELEX was in helping us to find a way forward whenever we encountered an obstacle. They took joint ownership of our challenges and were always ready to go the extra mile. So together we made this work and work well."
Andrew Rafferty,
Director of IT & eCommerce, Booths

"We planned to do a three month pilot with just three of our buyers, but well before the end of those three months we had all of our buyers, all of our locations, all of our producers and all of our products running on RELEX."
Mushtaque Ahmed,
COO, JJ Food Service Ltd.

"It is not very often that a complex development project actually seems set to pay for itself before it ends but that reflects the degree of impact it's had on our operations."
Esko Sutelainen, Vice President,
Suomen Lähikauppa.

"We examined the European marketplace, and could not find a better solution to control a multi-echelon supply chain with both continuous and short-lifecycle products."
Henrik Larsson, COO,
Granngården

About Martec International

Martec International is a specialist retail consulting and training company and the market leader in this type of research. We assist retailers to improve their business performance and help suppliers to retail to execute their go to market strategies more successfully.

Our clients include retailers, technology and merchandise vendors, ingredient manufacturers, CPG and FMCG companies, banks, telecommunications companies and venture capitalists.

If you would like to discuss further details of this report or any of Martec's services please visit:
www.martec-international.com

MARTEC
International

WWW.MARTEC-INTERNATIONAL.COM

RELEX

WWW.RELEXSOLUTIONS.COM