



# The On-Shelf Availability Challenge

2007–2008

A report into the current state of OSA in the Australian and New Zealand food and grocery industry

In conjunction with

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For more information about ECR Australasia, visit [www.ecraustralasia.org.au](http://www.ecraustralasia.org.au)

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## About Accenture

Accenture is a global management consulting, technology services and outsourcing company. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. With more than 180,000 people in 49 countries, the company generated net revenues of US\$19.70 billion for the fiscal year ended 31 August 2007.

The Accenture Retail industry group has helped more than 400 retailers from around the world develop adaptive, executable strategies in uncertain environments. Accenture's consulting experience with the world's leading retailers and our independent research provides retailers with food for thought – and helps them progress in their journeys toward high performance.

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# Executive Summary

Poor on-shelf availability (OSA) continues to be a key operational challenge for retailers and manufacturers alike, due to its negative impact on the top and bottom lines and on consumer sentiment. It is also resistant to easy solutions.

With loss of sales linked to poor OSA costing the Australian and New Zealand food and grocery industry over AUD\$3.2 billion, there is broad consensus that OSA is a mission-critical issue for the industry, one that is set to become more serious in the near future.

Despite this consensus, only limited progress has been made to improve OSA within the industry. There are a number of drivers that make effectively addressing the problem of poor OSA complex; this study by the Efficient Consumer Response Australasia (ECRA) and Accenture sheds new light on these.

One of the main drivers is the lack of a common language and measures to effectively identify and communicate the OSA levels within the industry. This is the case right now in the mature and sophisticated markets of Australia and New Zealand. Only 39% of industry participants are measuring OSA in a consistent way and only 18% are satisfied with the way they measure it. Clearly, there is an opportunity to create a more consistent measure, one that will facilitate the industry's long-term management of OSA.

OSA needs to be measured consistently first, before the right causes and solutions begin to be identified and implemented.

Another driver is the apparent discord between retailers and suppliers about the root causes of poor OSA. While suppliers focus on retailer-dependent data as the problem, retailers suggest it is poor availability of supply that compromises OSA.

Without a consistent measure and without better collaboration between industry participants, it is difficult to prove or disprove such hypotheses. Without change, the industry will continue to 'spin its wheels' on the OSA issue.

*"On-shelf availability is business-critical and remains a key challenge for fulfilling shopper requirements. There are few prescriptive answers available to solve this complex problem; this report is an excellent first step in driving whole of industry improvements."*

**Ian McDonald, General Manager Global Sourcing, Woolworths Limited (ECRA Project Co-Sponsor)**

## The road forward to improve OSA

This study and the associated industry workshop generated three key recommendations:

- There is a need to develop a **common language** for OSA, with clear definition of terms being the most important first step for the value chain partners.
- Industry participants must develop a more aligned view of the **root causes** of poor OSA.
- The industry as whole needs to improve its levels of **collaboration** to better address this issue in the future.

## The roadmap in action

The project team and, more importantly, the industry working group have been working through the recommendations and are in the process of coordinating increased collaboration between retailers and manufacturers on how to deal with OSA.

These efforts will generate further insights into how to measure OSA and the root causes of poor OSA. Real-life trials and initiatives are taking place that should jump start progress on the issue. The industry and consumers are set to benefit.

ECRA, Accenture and the contributors to this report strongly encourage your participation in the future work program to help improve consumer satisfaction levels.

*"Making significant and sustainable improvements to on-shelf availability requires cross-functional and organisational boundaries to be removed. Focusing on creating new value together through greater alignment and co-created solutions necessitates an intimate understanding of each other's business. It is a complex problem and requires continual focus from individuals, trading partners and the industry as a whole."*

**Andrew Cummings, Managing Director, Clorox Australia Pty Ltd (ECRA Chair/Project Co-Sponsor)**

# Acknowledgements

This study and final report were made possible through the active support of and contributions from the industry project team and their respective companies.

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Andrew Cummings, Managing Director, Clorox Australia Pty Ltd  
Ian McDonald, General Manager Global Sourcing, Woolworths Limited

## The ECRA Working Group

The following team members are thanked for their contribution and support:

| <b>Group Member</b> | <b>Company</b>                       |
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| Mr Derek O'Donnell  | Coca-Cola Amatil Ltd                 |
| Mr Richard Wormald  | Coles Group Ltd                      |
| Mr Paul Rampling    | Colgate-Palmolive Pty Ltd            |
| Mr Brendon Lawry    | Fonterra Brands (NZ) Ltd             |
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| Mr Mario Carniato   | Kimberly-Clark Australia Pty Ltd     |
| Mr Damian Ross      | Mars Snackfood Australia             |
| Mr Michael Haire    | Metcash Trading Ltd                  |
| Mr Paolo Finucci    | Nestle Australia Ltd                 |
| Mr Lindsay Davidson | New Zealand Food and Grocery Council |
| Mr Brendan Holsken  | PZ Cussons Australia Pty Ltd         |
| Mr Iain Myers       | Sanitarium Health Food Company       |
| Mr Terry Toffolo    | SCA Hygiene Australasia Pty Ltd      |
| Mr Travis Liersch   | Simplot Australia Pty Ltd            |
| Mr Steve Mitchell   | Unilever Australasia                 |
| Mr Justin Henderson | Woolworths Limited                   |
| Mr Wesley Taylor    | Woolworths Limited                   |

## The Accenture Team

Accenture in collaboration with ECRA developed and conducted the survey on which this report is based, helping fulfil ECRA's commitment to the development of the food and grocery industry in Australasia and worldwide.

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# Introduction

## Worldwide OOS levels

Maximising On-Shelf Availability (OSA) is a common goal for both retailers and manufacturers as it ensures that sought-after items are available for purchase by shoppers.

OSA is most often expressed as the percentage of items that are in stock or conversely out of stock (OOS) at a particular point in time. The most common approach to OSA refers to a system-generated figure that is based more on the availability of stock in store as opposed to what is on the actual shelf.

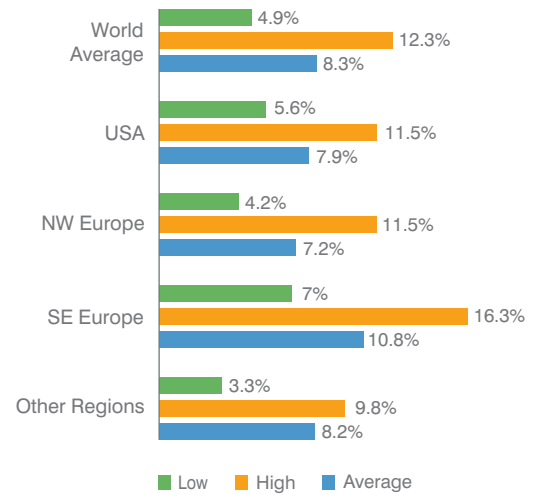
Maximising OSA has been on the agenda for both retailers and manufacturers for a long time. Various capabilities, systems and processes have been put in place by both parties to achieve greater OSA. At the same time, there is an informal consensus in the food and grocery industry that there is still a long way to go before the loss of sales from items that were not there when shoppers wanted them is a negligible figure.

Not surprisingly, there has been a lot of work done across the world to understand in-stock and OOS levels, their effects on shopper behaviour and their impact on the performance of retailers and manufacturers.

This study aims to develop a deeper understanding of this issue in the Australian and New Zealand markets.

The figure below, from Grocery Manufacturers Association (GMA) worldwide study on OOS levels, shows that, at best, an OOS level may be expressed as a range. The range varies across regions but overall between 4% and 11% of all items are OOS at the time of measurement.

Figure 1. World-wide estimates of out of stocks



Source: GMA Worldwide OOS Study, referred to at <http://www.gmabrands.com/events/docs/isld2004/outofstocks.pdf>

GMA's study found that items that are offered on promotion or that have a high sales velocity are more likely to be OOS as supply fails to keep up with demand.

## Consumer reactions

Consumers faced with an OOS situation have been observed to display a range of behaviours: from (most commonly) purchasing the item at a different store through to buying another brand or a different item or delaying purchase. This range of behaviours is illustrated on the chart below.

The most common behaviour, that of buying the same item at a different store, clearly shows that retailers' sales are directly at risk if OSA is not effectively addressed.

**Figure 2. Range of consumer reactions to out of stocks**



Source: GMA Worldwide OOS Study, referred to at <http://www.gmabrands.com/events/docs/isld2004/outofstocks.pdf>

These direct short-term financial consequences for retailers and manufacturers can generate more long-term effects if the problem persists, including lower levels of consumer satisfaction and potential defection to rival chains or brands and, in turn, erosion of brand equity and performance.

Recent economic and industry trends, such as increased global sourcing and persistently high levels of promotions, potentially make OSA an even greater priority than before. Although the key players in the Australian and New Zealand retail industry have made significant investments in technology and process improvement, this market still needs to further explore and understand its options for controlling and maximising OSA.

The ECRA Board has pursued the OSA agenda for some time.

In 2001, ECRA commissioned a study in response to growing desire to address the OOS issue in the Australasian grocery industry. The report of the study is entitled *A Guide to Efficient Replenishment and Reducing Stock Outs within the Grocery Industry*. Respondents were asked for their views on the importance and suitability of future ECRA work streams, and in particular what areas of OSA needed further attention as a subject of study by ECRA.

A key finding of the study was an estimation of OOS levels in the Australian and New Zealand grocery markets. At 5–10%, this estimate was broadly in line with the global levels. It translated to a loss of sales potential for retailers of around AUD\$500 million to AUD\$1 billion.

ECRA's report contained a number of broad recommendations designed to improve OSA for the grocery industry, including:

- **Measure and analyse stock outs to determine their root cause**
- **Invest in improving store management**
- **Integrate demand and replenishment processes**
- **Reduce lead times and increase the frequency of replenishment**
- **Understand responsibilities at each stage of the supply chain**
- **Invest in appropriate enabling technology and improve data integrity**
- **Involve trading partners in collaborative efforts.**

ECRA followed up its 2001 study with a 2005 study, which confirmed OSA as the most important priority for the Australasian food and grocery industry.

This study, a joint project between ECRA and Accenture, progresses the OSA agenda to a more practical level. The study revisits and analyses the current state of OSA and its impact on the industry. At the same time, it provides a specific set of recommendations and actions. Ultimately, the intention is to mobilise the industry into improving the on-shelf offer.



• TEA, COFFEE,  
• MILK, SUGAR  
• BREAKFAST FOODS  
• BISCUITS, SPREADS  
• DRIED FRUITS

5



# Objectives and Approach

ECRA's primary objective in commissioning this study is to drive the improvement of OSA via the development of a common industry strategy for Australia and New Zealand.

The 2001 ECRA study highlighted the challenge and opportunity for OSA in Australia and New Zealand by outlining seven proposed actions across the supply chain. No industry-wide study has been conducted since 2001. This has created a knowledge gap in the current status of OSA and key priorities for the food and grocery industry to address.

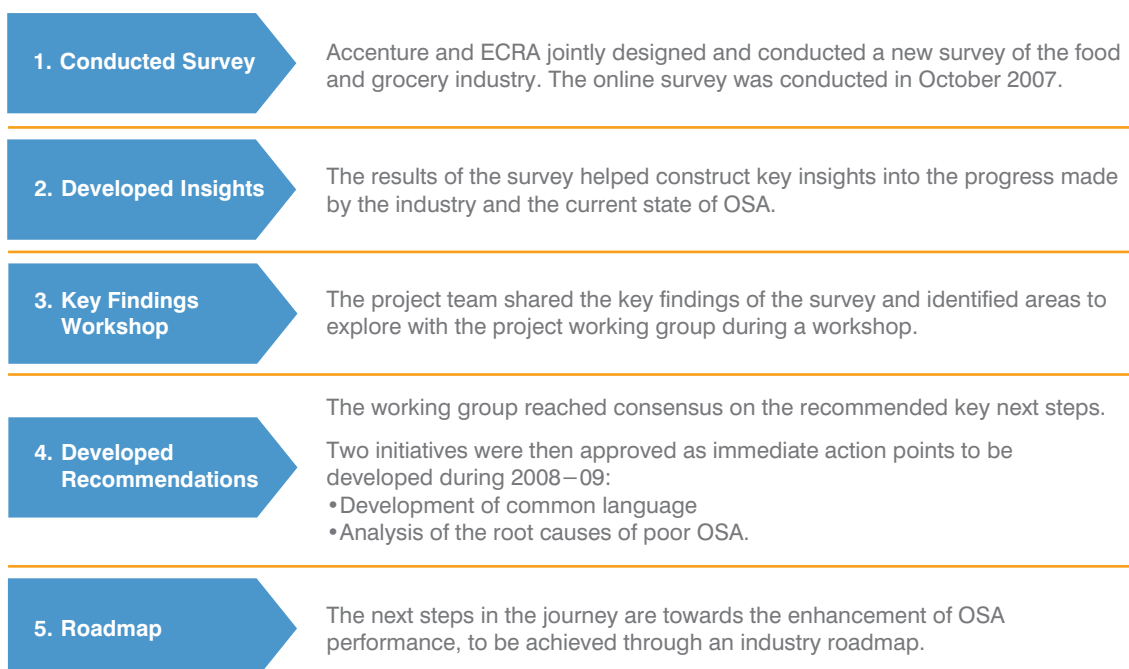
This study provides a view on how the food and grocery industry has advanced on improving OSA levels since the 2001 study, and increases clarity on the current OSA challenges being faced by the industry. These challenges are discussed in relation to the increasing complexity of the value chain and trading environment.

The study comprised the following elements:

- **Analysis and confirmation of the current state of and the agenda for change for OSA in the Australian and New Zealand food and grocery industry**
- **Evaluation of the 2001 study recommendations to determine industry progress against each**
- **Survey of the food and grocery industry to review the following:**
  - The existing OOS measure
  - The previous root cause analysis assessment
  - The impact of significant industry changes in the supply chain and the market
  - The barriers preventing adoption of OSA recommendations
- **Development of an industry-wide roadmap to improve OSA performance, involving:**
  - Identification of initiatives to determine the value proposition to the market
  - Revision and update of the industry action plan and standard approaches to and measures for OSA.

Integral to the success of the study was the involvement of key industry participants, ensuring industry views were captured in the first phase via a comprehensive survey. The survey results are key to the development of initiatives that will be significant in making lasting improvements to OSA in Australia and New Zealand.

**Figure 3. Five Phases of the AFGC/Accenture OSA study**



## Survey

An anonymous, web-based survey was issued to food and grocery suppliers and retailers in Australia and New Zealand in October 2007. The survey was the key mechanism to obtain an industry status update and to review the adoption of recommendations from the 2001 study. In addition, it was intended to identify the concerns underlying the issue of OSA and to provide input into the development of an industry roadmap. This roadmap will provide an action plan outlining the key areas for focus and how specific measures may be tailored to the dynamics of the industry.

The survey was targeted at senior executives in high-revenue retailer and supplier organisations in Australia and New Zealand.

The survey consisted of quantitative questions, in multiple choice or ranking format, and qualitative questions. The qualitative questions allowed respondents to provide greater context and examples regarding the issues surrounding OSA, via free text responses.

The questions were structured so that the respondents could provide their viewpoint and perspective on the current issues, trends and challenges affecting OSA. The responses provided the necessary insights into the as-is environment and helped shape the study response to the major concerns of the industry.

The questionnaire was structured around 35 questions. These reflected the objectives of the study, covering:

- Importance of OSA
- Impact of poor OSA
- Root causes of poor OSA
- Measurement of OSA
- Adoption of recommendations from 2001 report
- Key challenges
- Critical success factors
- Future direction and priorities.

## Survey response

A total of 67 responses from the online survey were received. This reflects a very high response rate for a survey of its kind conducted in the Australasian region.

The following charts provide a snapshot of respondents that took part in the survey. They comprised a mix of suppliers and retailers, with 75% having a turnover of AUD\$101 million or more. Six out of the seven retailers had an annual turnover in excess of AUD\$1 billion. This is a characteristic of the major retail chains, which take up the majority of the market share in Australia and New Zealand.

As the charts overleaf show, the range of fast- and slow-moving products sold by the respondents was diverse. It included edible groceries, fresh foods, health and beauty products and non-edible general merchandise.

*“The survey received a very high response rate for a survey of its kind conducted in the Australasian region.”*

Figure 4. Demographic Sample breakdown of the AFGC / Accenture OSA Study





# Key Findings

## 5.1 Minimal improvement since the 2001 study; need for direction on industry priorities

Some progress has been made on the recommendations from the 2001 study. However, considering that a substantial degree of investment is required from industry to successfully execute OSA initiatives, direction must be provided and recommendations prioritised.

### Execution of OSA initiatives is challenging

The 2001 report provided a number of recommendations to the industry, which detailed actions that could be carried out along the supply chain to improve OSA performance. The survey for this study attempted to evaluate the degree to which the industry has progressed against each recommendation since the 2001 study. In relation to each recommendation participants were asked to

nominate a level of perceived importance, a level of activity in the past five years and a level of success.

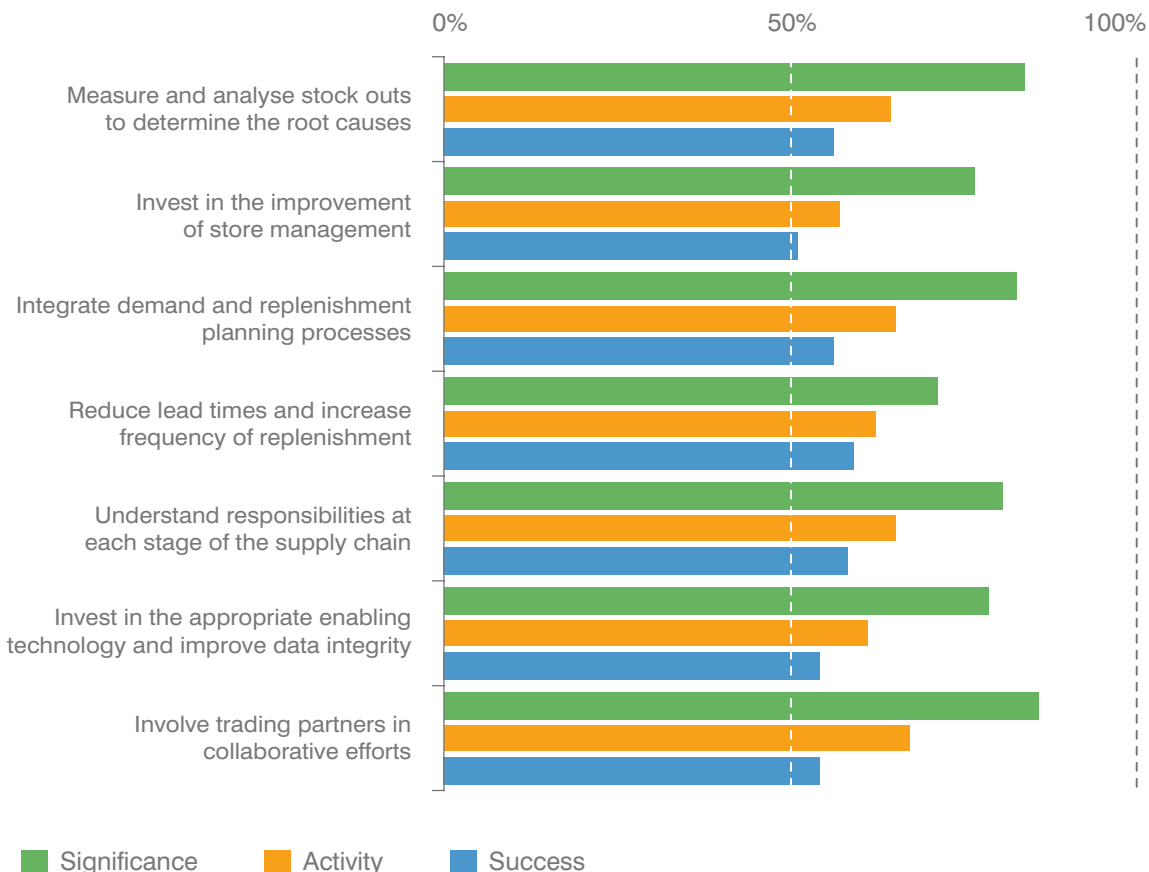
From the survey results it is evident that:

- All seven recommendations were viewed as important.
- There has been some level of activity in each recommendation.
- Levels of success in following through on the recommendations were uniformly lower than their significance or level of activity linked to them.
- There is no standout highly successful recommendation.

Respondents also stated that actions for improvement had been impacted by a number of other factors including:

- Complexity of implementation
- Competing demands
- Increased labour costs
- Lack of collaboration across the value chain (“actions [are] only being undertaken in silos and pockets”).

Figure 5. Summary of the industry response and progress to the 2001 AFGC OSA report recommendations



The respondents who had greater success implementing their initiatives for improvement stressed the importance of having appropriate resources with appropriate capabilities and processes. In addition, 75% of respondents agreed that supplier and retailer alignment was another critical success factor.

**Need to clarify industry priorities**

The survey results show that the industry has applied effort and made progress on all of the seven actions highlighted in the 2001 report. Still, improvement across the board has been minimal because of a lack of direction and a lack of recommendations requiring collective focus on the part of the industry.

Higher levels of OSA performance require clear industry direction and prioritisation of action areas. Greater collaborative effort among trading partners was also identified in this study as the area of improvement that is key to overcoming the operational complexities involved in executing the recommendations of the 2001 report.

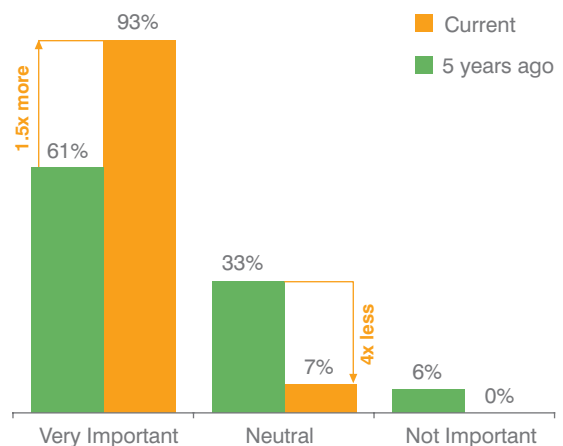
**5.2 Industry at a crossroads: OSA importance is high, but common language to define, measure and manage is missing**

Most survey respondents agreed that OSA is a critical issue. In fact, the primary impact of poor OSA was cited as financial, with the industry losing over AUD\$3.2 billion per annum. Yet there is still no common language for measuring OSA and the true root causes of the problem are still not well understood.

**Need for a timely response**

The importance of OSA has increased in the eyes of industry participants by a dramatic 30% over the last five years. Ninety-three percent of respondents now agree that OSA is and will continue to be a very important issue as the market becomes increasingly competitive, the trading environment becomes more complex and consumer spending goes through a period of uncertainty. The consensus among the industry working group was that even though OSA is very important, competing demands make it difficult to afford the issue the attention it deserves. As one working group member stated: “So much time and money is spent on Research and Development, competing and making another sale. OSA has received little attention, with actions only being undertaken in silos and pockets”.

**Figure 6. Trends on level of importance of OSA to the industry**



Now that the industry understands the importance of OSA, there needs to be greater focus on the opportunities that effective OSA offers. This will enable the industry to fully understand the size of the prize and the financial gains that can be achieved.

**Primary impact is financial**

The primary impact of poor OSA is perceived to be financial, with a direct loss of sales flowing through to the bottom line.

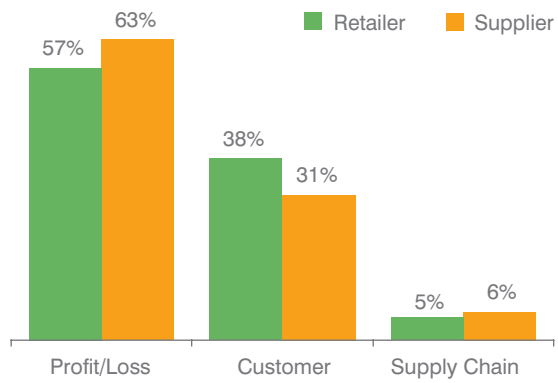
The secondary impact of poor OSA includes the loss of dissatisfied customers who may switch allegiances to a different brand or even to another retailer due to a frustrating shopping experience. This indirectly results in further financial losses for the retailer or the manufacturer.

A tertiary impact of products not being available on the shelf is on supply chain effectiveness through the distortion of demand. This complicates and compromises the accuracy of forecasts used to drive replenishment of stores.

Direct losses can vary for manufacturer and retailer by the type of consumer response formed when a shopper is confronted with an empty shelf.

A consumer’s response to an OOS item can vary. The table below shows the possible scenarios from most to least likely and the impact for both the retailers and manufacturers.

**Figure 7. Types of impact from poor OSA**



**The impact of OSA is wide-reaching:**

- Primary impact – financial
- Secondary impact – loss of customers
- Tertiary impact – supply chain effectiveness.

**Figure 8. Industry impacts from consumer responses to poor OSA**

| Consumer Response                      | Retailer Impact  | Manufacturer Impact  |
|--|--|--|
| <b>1. Buy Item at Another Store</b>    | Yes (most problematic of all five options to the retailers).                     | No   |
| <b>2. Substitute – Different Brand</b> | No (but there is partial loss when consumer substitution is smaller or cheaper). | Yes (most problematic of all five options for the manufacturer).                 |
| <b>3. Substitute – Same Brand</b>      | No (but there is partial loss when consumer substitution is smaller or cheaper). | No (but there is partial loss when consumer substitution is smaller or cheaper). |
| <b>4. Delay Purchase</b>               | No (but negatively affects cash flow and inventory turns).                       | No (but negatively affects cash flow and exaggerates demand fluctuation).        |
| <b>5. Do Not Purchase the Item</b>     | Yes  | Yes  |

Source: GMA Worldwide OOS Study, referred to at <http://www.gmabrands.com/events/docs/isld2004/outofstocks.pdf>

**At least AUD\$3.2 billion per annum in lost sales**

The survey attempted to quantify the financial impact of poor OSA for the industry. This was achieved by asking the participants to estimate and explore the loss of sales as a result of poor or no availability in percentage points. The intent was to provide a comparison with the results of the 2001 study and to identify the level of progress achieved by the industry. The results also enabled benchmarking against global figures.

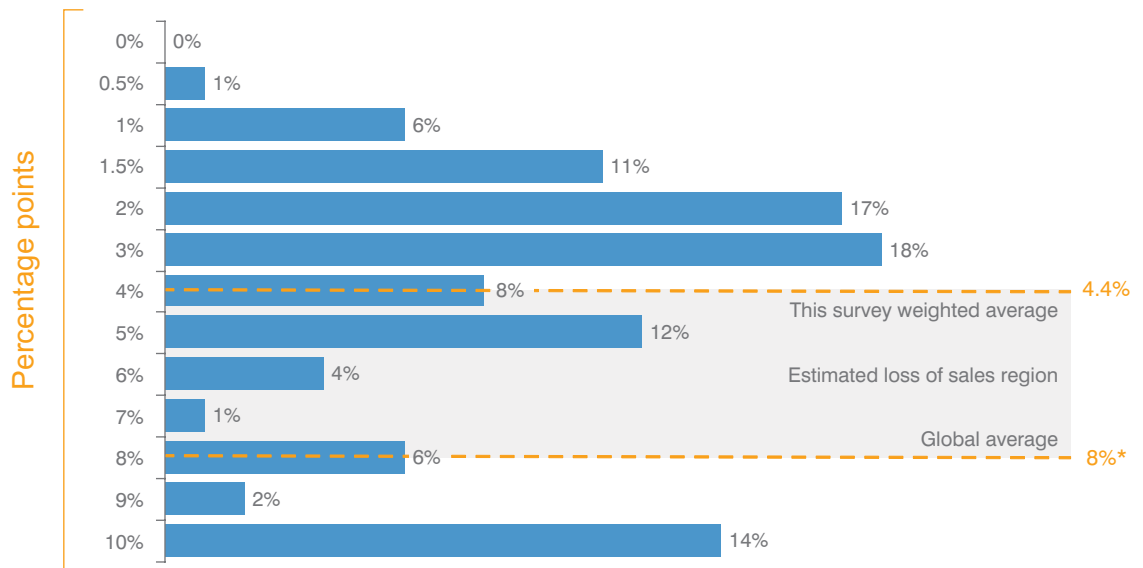
From the chart below it is evident that there are two peaks in the survey results. Seventy percent of respondents estimate the percentage point loss in sales to be 2–5%, and a significant portion feel it is above 10% of sales value.

The percentage loss in sales responses resulted in a weighted average of 4.4% for the current survey. This is marginally lower than the value range of 5–10% quoted in the 2001 study. This value is also significantly lower than the global average of 8% presented in the Retail Out-of-Stock Report (CIES FMI and GMA) and in a number of global studies.

Based on the survey’s finding of weighted average loss in sales of 4.4% and on the global average of 8%, the estimated financial impact is calculated to be at least AUD\$3.2 billion but most likely closer to AUD\$5.8 billion.<sup>1</sup>

*1 The dollar values were calculated with reference to the 2006 Australian Food Statistics, published by the Department of Agriculture, Fisheries and Forestry.*

**Figure 9. Loss of Sales impact from Poor OSA**



\* Source: Retail Out-of-Stock Report (CIES FMI and GMA)



At first glance, the trend movement downward from 5–10% to 4.4% suggests an improvement in OSA since 2001. However, it is more likely that the industry is underestimating the true financial impact. The survey revealed that of those respondents that estimated the percentage in loss of sales, 58% are either not measuring or not using OSA as a KPI.

This is an indication that measurement is not common practice across the industry. In addition, the varying peaks in the survey results support the idea that there is a lack of consistent metrics and tracking to accurately calculate OSA.

Further data-points from other regions challenge the 4.4% OSA level.

- A recent North American industry analysis conducted by Accenture in 2007 confirmed that, on average, the OOS value is 8%, with even higher values of 13% during promotions.
- An ECR Europe study conducted in 2007 estimated the average in-stock position at 95.9% across the United Kingdom, measured using a basket of 200 SKUs.
- Further studies carried out by ECR in Europe in 2007 estimated the OOS value to be 9.5% in France and 5.7% in Denmark.

Current ECR research affirms that OSA levels differ from country to country. They are dependent on myriad factors, including but not limited to the level of maturity within a country, and the type of method used to calculate OSA.

Until the industry develops a common language for measuring the true financial impact of poor OSA it cannot be accurately quantified. The industry consensus is that this is unacceptable, given the multi-billion dollar impact on the bottom line of the retailers and the manufacturers in the region.

### Inconsistencies in measuring the true financial impact

Measurement is the basis for providing greater clarity about the true financial impact of poor OSA. Without it, there is difficulty for benchmarking and, ultimately, making sustained improvements. Measurement also enables the root causes of poor OSA to be identified and acted upon.

The maturity level of OSA measurement is still quite low in Australia and New Zealand, which is surprising given the overall high level of maturity for the industry and the markets. In fact, the survey found that 40% of the whole industry (both suppliers and retailers) are failing to measure OSA. There is significant opportunity for the industry to measure their OSA position in order to better understand the financial implications.

In situations where the industry is measuring OSA, there appears to be overall inconsistency in the method of measurement, the method of data collation and the frequency of measurement. What is consistent and universal is dissatisfaction with

the current process of capturing and reporting OSA levels. A common standard across the industry would allow common definitions to be set and procedures to be established, thereby enabling accurate comparisons with other retailers and suppliers and ultimately driving improvements in OSA.

### Inconsistent method of measuring OSA

Fifty-six percent of retailers are proactively measuring OSA. The other half of retailers are either measuring after the fact (i.e. via lost sales reports) or not measuring at all. From the suppliers' perspective, the number of respondents proactively measuring (33%) is even lower.

### Inconsistent method for data collection

The survey also revealed that a combination of methods is being used to collect data to measure OSA, with neither method more preferred.

- Thirty-three percent of survey respondents are using a *hybrid method* involving physical and electronic components.

Figure 10. Frequency of OSA measurement by type

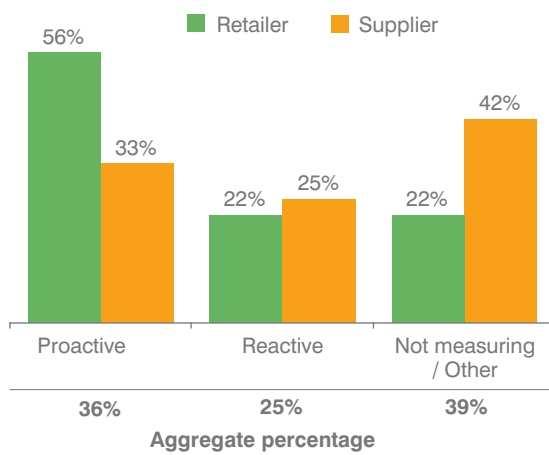
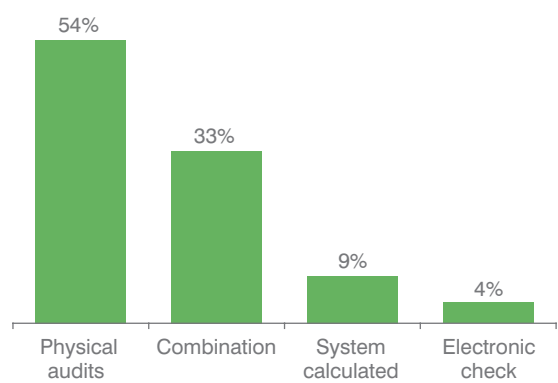


Figure 11. Data collection methods



**Proactive:** Measured at the unit level based on data that captures the percentage of SKUs available versus the total number of SKUs or a selection of SKUs (i.e. for a basket of goods).

**Reactive:** Measured at the volume level based on data that captures the percentage of SKUs that have zero sales for high-volume sales items or the percentage of SKUs that have zero sales for fast moving items with low sales velocity.

- Half are using a *physical method*, including physical audits by a defined basket of goods using store surveys or mystery shoppers.
- There is limited use (13%) of an *electronic / system generated method*.

There is significant opportunity for the industry to define a common approach to OSA measurement. Including this as a priority in the industry’s response to the current issue will help facilitate industry level alignment via common benchmarks.

**Inconsistent frequency of measure**

In terms of frequency of measurement, a significant proportion responded “other” (28%), which suggests further uncertainty about how and when to measure. Weekly measures were the most common (37%) and may provide the most optimal frequency to respond to OSA, with a daily measurement and response loop being held as the ideal for maximising OSA.

**Consistent need for improved measure**

The survey results highlight that there are low levels of confidence with the industry’s approach to OSA measurement. Only 18% of respondents are satisfied with the current methods, with 79% having neutral feelings, suggesting the desirability of a clear and consistent measure.

Figure 12. Frequency of OSA measurement

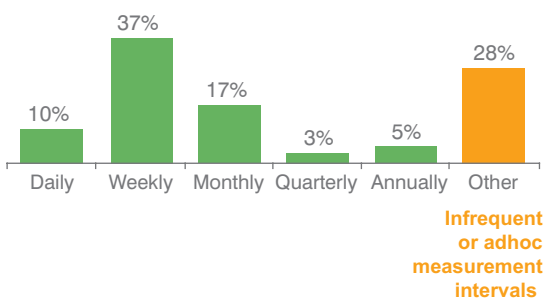
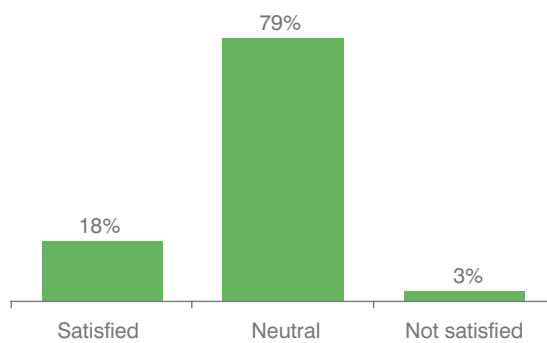


Figure 13. Level of respondent satisfaction with OSA measurement methods



## Coca Cola Amatil – OSA Measurement in action case study

The grocery industry reports out-of-stock (OOS) rates of 5–8% and that almost 25% of shoppers experience the OOS problem. The sales opportunity across the total beverage category is estimated at AUD\$167 million per annum.

### Background

While there are many ways to track OOS, this overview describes the approach taken by Coca-Cola Amatil (CCA) on this complex and longstanding problem.

CCA has been measuring OOS since the early 2000s, with the primary objectives of highlighting the potential of reducing OOS and providing a fact base for understanding and developing solutions to improving On-Shelf Availability (OSA).

CCA uses OOS measures based on sample data recorded by third-party infield surveys. This has provided an effective snapshot as well as trend-based insights across product lines and customers. To make further progress in reducing OOS, we have enhanced our capability to track performance and increase focus. Our new survey enables this.

### Current survey methodology

Using a touch screen survey, CCA sales reps focus on OOS at each and every store visit, capturing which products are unavailable for shoppers to purchase and why. The basic measure is OOS Incidence: the number of products OOS divided by the number of surveys completed. For example, over a three-week period, six surveys have been recorded, which counted a total of 11 products as OOS. The OOS Incidence is  $11/6 = 1.8$ .

A valuation model has been developed to provide a summary of the sales opportunity. The model calculates by major pack group the proportion of the OOS range, which is equal to OOS Incidence/Products Ranged. This proportion is used to calculate the sales opportunity. The standard valuation model tracks the OOS range and sales opportunity over a 13-week period.

One of the key drivers of success has been the simplicity of the measures – based on a count of actual OOS at a point in time. The new survey has made it easier to understand, talk about and develop practical action plans.

### 5.3 Tension in the value chain and misalignment on the root causes of poor OSA

The pursuit of a ‘Lean, Just in Time’ (JIT) supply chain and the maturing of the market continues to put pressure on OSA levels. In order to ease the tension in the value chain, industry alignment with the joint end goal of consumer satisfaction is required.

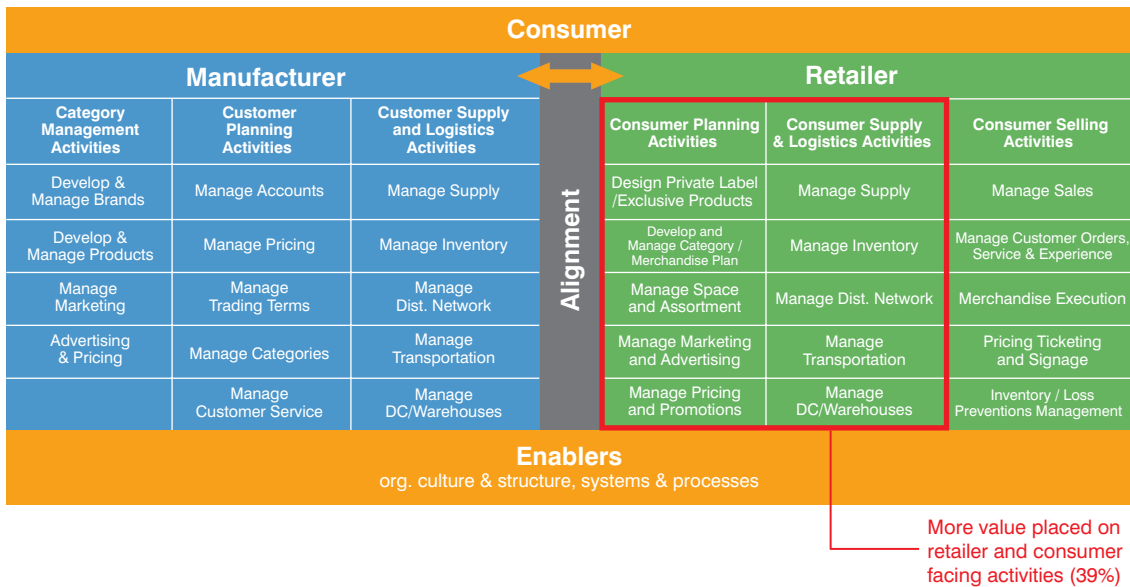
#### ‘Working together’ approach needed

In the quest to improve the performance of OSA, suppliers and retailers need to keep the consumer in mind. This will require the alignment of objectives around consumer satisfaction to ensure OSA is maximised in the future. Greater collaboration will be the first step towards driving towards this common goal.

When survey participants were asked what they perceived as the most important value chain area in maximising OSA in the future, consumer planning activities came out on top (18%). Second most important was consumer supply and logistics activities (19%).

The consumer is impacted by all activities carried out along the value chain. The type of activities that are undertaken by manufacturers and retailers are described in the diagram below.

Figure 14. Retail Value Chain representation



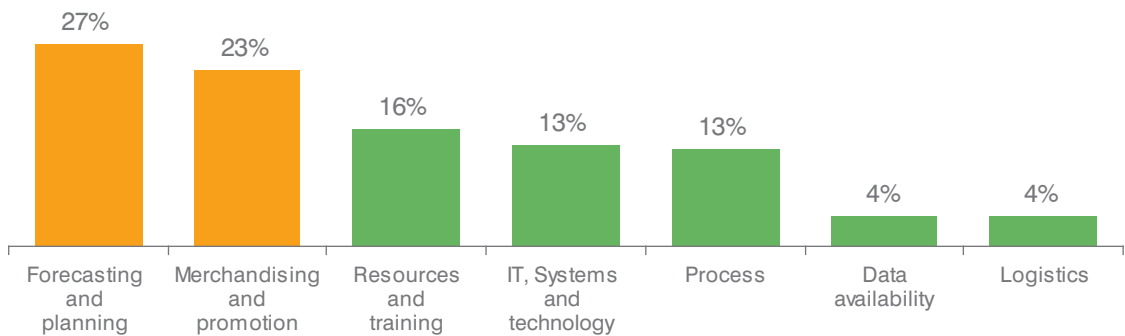
Planning activities such as forecasting, ordering and promotions were identified as most commonly affecting OSA. This highlights the importance of keeping the end consumer in mind in the future agenda for change.

In addition, focusing on consumer planning activities (50%) was identified as critical to improving OSA in the future. This was reiterated by the industry working group:

- “The decisions made upstream at head office have a significant impact on the last 50 yards.”
- “Better numbers, better plans are required from head office to reduce problems occurring downstream.”

Greater success in consumer facing activities requires greater alignment between trading partners. In fact, each critical success factor for improving OSA is driven by a commitment from suppliers and retailers to align their activities and process changes along the supply chain. The complexity of the issue means that one party cannot work in isolation to improve OSA. The industry must work together to tackle the lack of common language and align the disparate views on root causes.

Figure 15. Areas within Value Chain that maximize OSA



Emphasis on consumer planning activities



*“Given Metcash represents over 4,000 independently owned retailers, it is paramount that we focus on inbound service levels. The business has a high expectation that all suppliers target 100 per cent inbound, which would represent a high outbound percentage for our retailers. Daily replenishment reporting has been significant to establish transparent communication with all our trading partners to ensure open, clear dialogue at all times.”*

**Various root causes**

The survey asked participants to rank, from a list of 14 contributing factors, what they perceive as the top five root causes of the OOS problem. This provided an update to the previous root cause assessment conducted in 2001. The results are shown in the chart below.

After combining the responses from suppliers and retailers, the perception is that poor OSA can be attributed to factors related to planning and execution activities.

**Planning activities**

**Forecasting inaccuracy (19%)**

The top root cause, with a fifth of respondents in agreement, is that it is critical to get forecasting accuracy right. This includes having the right data to create the forecast. Without accurate historical data, the forecasting process can be seriously distorted.

Marketing tactics such as promotions and consumer volatility, which often create outliers, can also lead to distorted data.

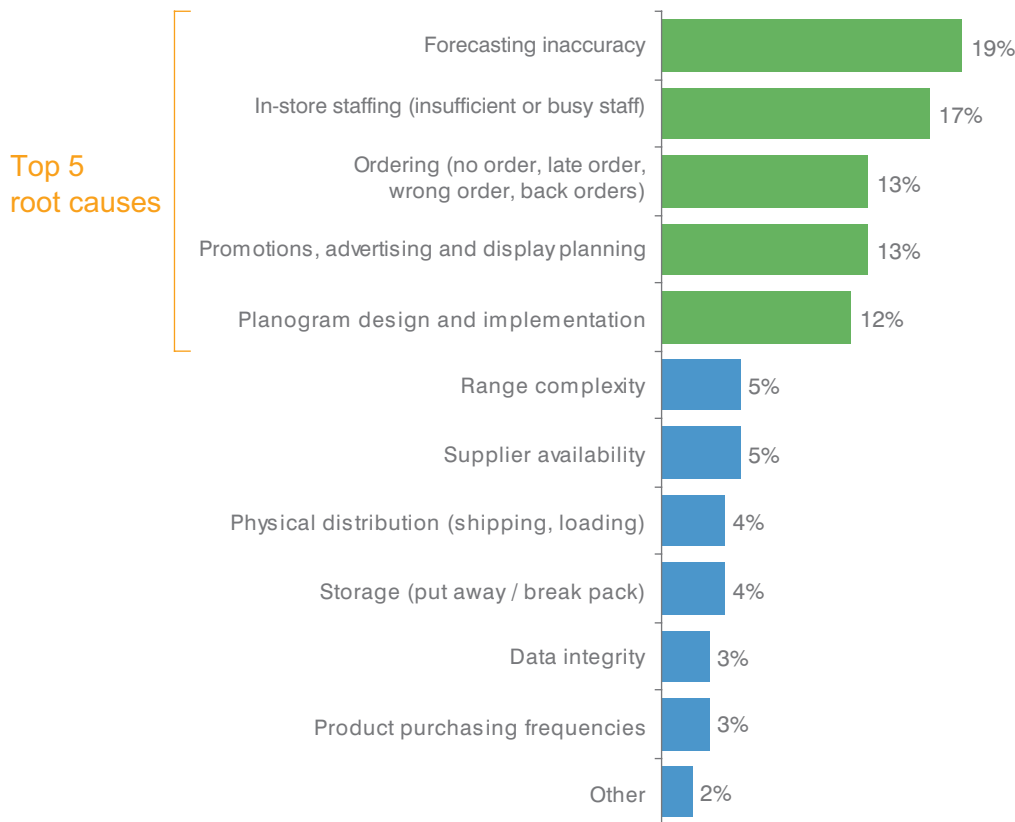
**Ordering (no order, late order, wrong order, back orders) (13%)**

An inaccurate forecast also causes issues downstream in the supply chain, especially during ordering. Incorrect orders, no orders and late orders are the result of a poorly developed forecast. Limits on production capacity that can cause back orders and stock outs can also lead to distorted data, which in turn can result in an inaccurate forecast. Ordering is also impacted by manual systems such as handheld devices that can generate human errors.

**Promotions, advertising and display planning (13%)**

Ineffective planning leads to complexities in the forecast and across the supply chain and in-store to handle peak shopping periods.

**Figure 16. Initial view on the Root causes of poor OSA**



**Forecasting inaccuracy (19%) and insufficient or busy staff (17%) were identified as the major root causes of poor OSA.**

**Execution activities**

**In-store staffing (insufficient or busy staff) (17%)**

This was the second-ranked root cause. There is concern within the industry that there are a limited number of skilled people to effectively manage OSA in-store. Respondents think that insufficient staff for restocking shelves, monitoring fast-moving items and managing issues is a factor. The fact that in-store staff have competing demands further complicates the issue. This highlights the importance of raising the awareness of the impacts of poor OSA at the store level through training and education programs, as well as focusing on better integration with up-stream activities.

**Planogram design and implementation (12%)**

This was the fifth-ranked root cause. The industry believes that inefficient planogram design, including shelf-space allocation, product positioning and shelf layouts, coupled with the poor execution of new planograms, is another factor reducing OSA.

**Perceived true root causes vary**

The results for the above root causes were analysed as an average from the whole industry. When the results are dissected from a supplier versus retailer viewpoint, the results are quite varied. Overall,

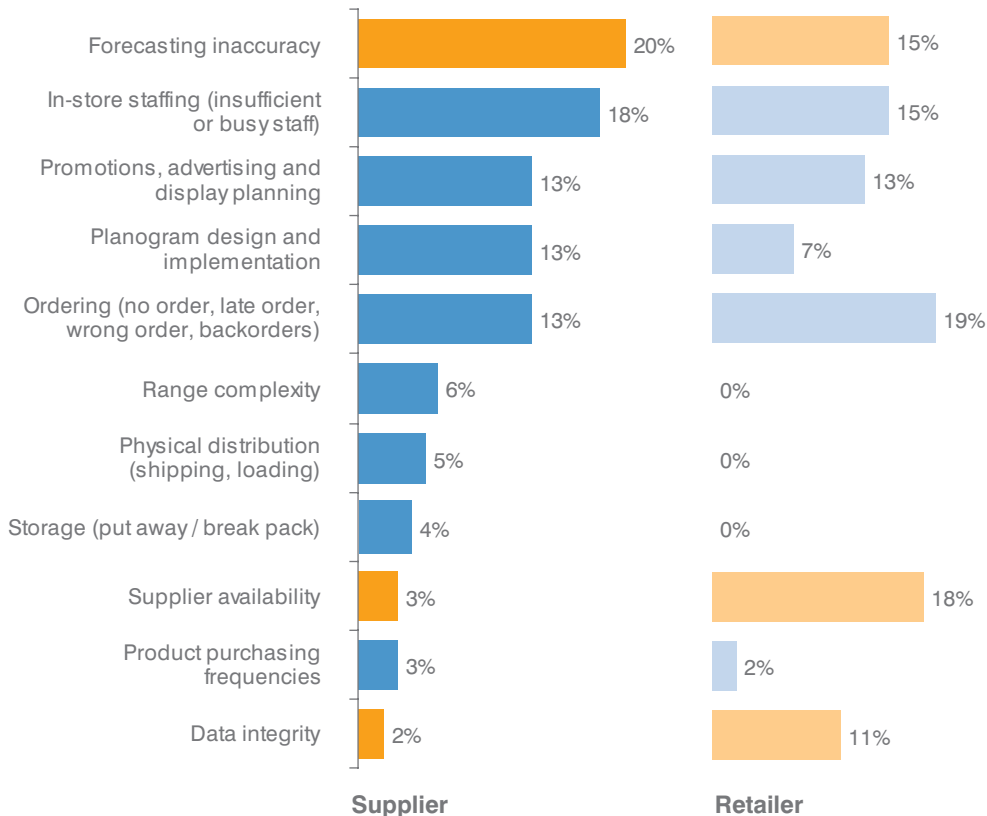
suppliers viewed forecasting inaccuracies as the significant cause for poor OSA while retailers blamed supplier availability as the contributing cause. The results are summarised in the chart below.

Retailers viewed availability of supply as more important (18% of retailers compared to 3% of suppliers). In addition, retailers placed more emphasis on data integrity as the root cause of poor OSA than suppliers (11% retailers vs. 2% suppliers). Suppliers were more concerned about inaccurate forecasts distorting demand and hence compromising their ability to supply to retailers.

Miss picks and inefficient in-store processes leading to poor data integrity were also identified as a bigger issue for retailers than suppliers (11% retailers vs. 2% suppliers). This highlights the concern that without timely and accurate data to measure OSA there is uncertainty about its true impact.

The planning and execution processes perceived as the top five root causes have complex interplay and feedback loops with other processes along the value chain. These complex interactions between processes make it difficult to define true root causes and isolate issues.

**Figure 17. Supplier and retailer point of view on root causes of poor OSA**





Maintaining availability in the store is part of a chain of events. A number of interconnected activities occur at different points along the value chain to ensure stock is available on the shelf. The complexity of these interactions means that it is vital that both supplier and retailer work together in order to achieve the most effective and efficient results. If both continue to blame each other for OSA issues, the true root causes cannot be defined and hence will remain unaddressed.

**Heightened need to respond to the OSA issue**

OSA has thus far been shown to be negatively impacted by poor measurement, misalignment on root causes and lack of industry collaboration. This is further complicated by the fact that the market is maturing.

Market maturity has led to greater importance being placed on competition for sales and promotional activity (37%). These two factors are a reflection of less loyal customers, who are willing to shop around to drive their dollar further.

A number of other industry trends were captured to obtain feedback from the industry as to the current

factors driving the importance of OSA. These trends are shown in the chart below.

While suppliers and retailers currently view the competition for sales as the most significant factor raising the importance of OSA, there are some key differences in opinions regarding other industry trends.

From the retailers' perspective:

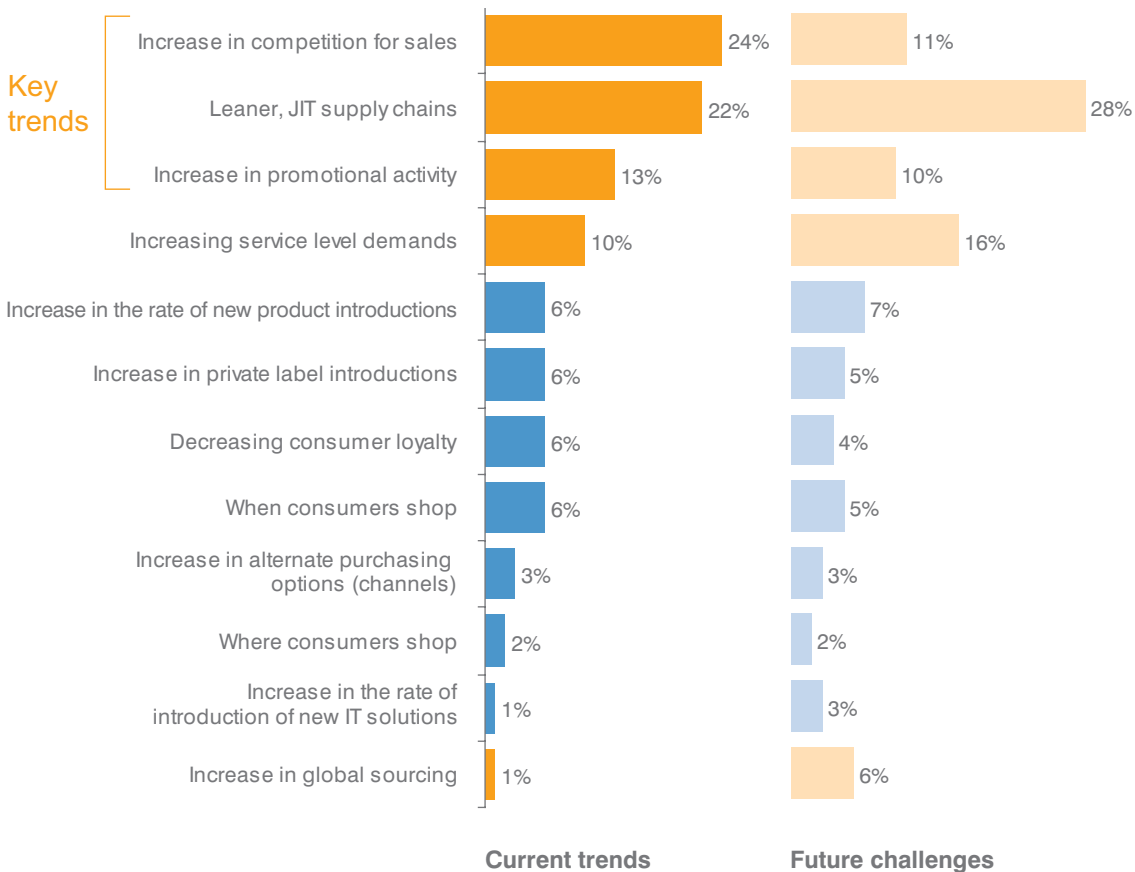
- Increasing service level demands are putting more pressure on dealing with OSA, as groups strive to retain their customers
- Alternate purchasing options are a major concern.

**Current and future drivers of importance of OSA**

Overall, the top three emergent drivers that will increase the pressure on getting OSA right are leaner, JIT supply chains, increasing service level demands and the increase in competition for sales.

These three emerging trends will mean there is less stock in the value chain that can be used as a buffer; consumers will react in an active manner to OOS

**Figure 18. Current and future drivers of importance for OSA**

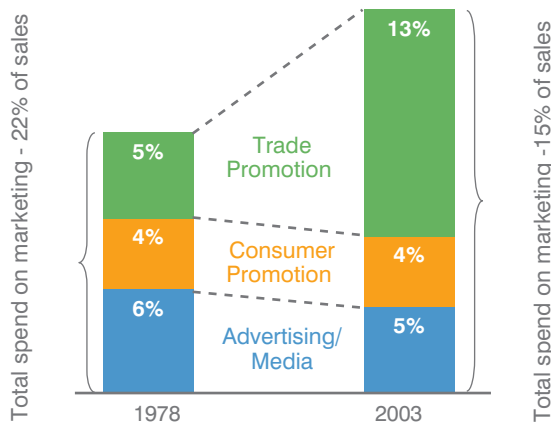


levels; and there is a higher risk of losing a sale to competitors if items are not on the shelf.

Other trends include the increase of promotional activity, which creates additional strain on the whole value chain – from forecasting through logistics to effective execution on the shop floor. There has also been an increase in the importance of global sourcing, which has a significant impact on lead times and complicates the supply chain process.

The graph below illustrates the industry’s perception of current trends and future challenges.

**Figure 19. Current trends and Future challenges**



Source: Donnelley Marketing and Accenture Analysis

**Increased competition for sales**

The results show a decrease in the trend of increased competition in the future. This is not to say competition will get any easier; it is merely an acknowledgement by the industry that competition cannot get any harder. Intense competition for sales will continue. The decline of 13% suggests that other challenges will supersede increased competition intensity as a concern.

**Leaner, JIT supply chain**

A quarter of respondents highlighted this as a major concern in the next three to five years. A leaner, JIT supply chain highlights the risk of the OOS position due to the push towards a reduction in inventory and smaller margins of forecast error.

**Increase in promotional activity**

The proliferation of promotional activity looks set to continue as new products are introduced. A recent study carried out by Accenture highlights that trade promotion spending has increased by 8% in the last 25 years. In addition, the increase in promotional

activity is evident by the total spend on marketing, which has jumped from 15% in 1978 to 22% in 2003.

**Increasing service level demands**

The future is likely to require a greater focus on supply chain operations. As retailers strive to retain their customers, increasing service level demands are likely to cause greater operational pressures on the supply chain.

The fact that customers demand growing customisation requires special handling by third parties and the proliferation of SKUs to be managed in the supply chain. Furthermore, the problem with new product introductions is that a well-established distribution channel needs to be developed, during which time OOS can be more prevalent than for established products not suffering from such shortcomings.

Effective promotional campaigns are also more significant as consumers are expected to tighten their belts as they react to the pressures of rising fuel prices and interest rates. By increasing demand, promotional activities magnify the effects of supply chain inefficiencies. There also needs to be a direct link between developing a forecast and promotional campaigns to minimise the risk of OOS, which can triple during promotional activity.

**Increase in global sourcing**

The perception is that global sourcing, which may produce longer lead times and strain on the supply chain, is likely to increase. This goes against retailers’ moves to reduce lead time and inventory holdings as they aim for a leaner supply chain.

The trends referred to above will only continue to grow and their impact on OSA will continue to become more significant. If the industry does not act to improve OSA levels, the situation will not remain static but will instead slowly decrease until OSA hits an unacceptable level.

**The risk of OOS can triple during promotional activity.**



# Future Agenda for Change

Both the investigation of how recommendations from the 2001 study have progressed and the results of the survey highlight the need for the industry to adopt three principal reforms:

- 1 **A common language for measuring OSA**
- 2 **Clear definition of true root causes and prioritisation of these without bias**
- 3 **Increased collaboration among trading partners.**

There is a consensus that the way forward requires the industry to develop and adopt a common language for measuring OSA. This common language will need to meet three key criteria:

- The measure needs to be clear. Each retailer needs to develop for their organisation a standard metric that includes term definition, and they need to communicate this to suppliers.
- The measure needs to be kept consistent. This requires retailers to keep using the same measure and informing suppliers when the measure has changed.
- The measure needs to be transparent and facilitate sharing of data and information between suppliers and retailers.

Creating and facilitating a common language requires greater collaboration and information sharing between retailers and suppliers in the future agenda for change.

It is imperative that the industry works together to agree on true root causes, and trading partners need to develop an intimate understanding of each other's business to enable operations to be improved along the value chain. A shift in mindset is required to ensure an industry-wide approach is undertaken rather than each organisation working on its own.

This way, significant gains can be made faster. The approach should ensure that suppliers and retailers have the same shared goal – consumer satisfaction.

Improvement and change will not happen overnight. A key message from survey participants was that initiatives to improve OSA require investment in not only resources but also collaboration. Collaboration will be facilitated by the industry showing direction on the key areas needing improvement. This must come in the form of clear and succinct recommendations coupled with an actionable roadmap that will lead to improved OSA. This will benefit manufacturers, retailers and, most importantly, customers.

## 6.1 Recommendations

### Develop a common language

**The survey results showed that 53% of respondents are not using OSA as a KPI, making it difficult to monitor improvements.** In addition, 40% are not carrying out standard measuring. There is a need for greater, proactive measurement to respond to the problem before sales are lost. In the short term, this can be achieved if suppliers and retailers simply start measuring OSA.

In the medium to long term, retailers should aim for a consistent method of measuring that is timely, accurate and reproducible. Without measurement there can be no conclusive, data-driven insights into the scale of the problem and its financial impact. Furthermore, a lack of measuring reduces the ability to drill down into the root causes, and it hinders the ability to monitor progress and act on the issues significantly impacting OSA.

A clearly defined measurement method along with commonly accepted definitions and guidelines is important for a number of reasons. It provides:

**A common language for measuring requires:**

- **Clarity, in how terms are defined**
- **Consistency, i.e., keeping the same measure**
- **Transparency, to facilitate sharing information between suppliers and retailers.**

- Greater insight into the financial impact of OSA
- A mechanism for benchmarking (as one survey respondent said, “Without a consistent method there is no way of benchmarking or seeing improvements”)
- A capacity for comparison against global leading practices
- A capacity to analyse root causes and determine if they are being fixed.
- A method that is meaningful to both supplier and retailer
- A method that is consistent across an organisation
- Definition of what, who and how to measure
- A method that defines where to measure along the supply chain
- Agreed measures along the supply chain, from the distribution centre to the store
- Focus on the consumer perspective
- A method that enables the sharing of existing data
- A composite data measure that can isolate root causes
- A method that includes set guidelines.

Essentially, there are two ways to measure OOS rates:

#### **Manually – ‘The direct approach’**

Employees or third parties record visible OOS situations by physically looking for shelf gaps.

This method has the advantage that causes can be noted at the same time as measurements are taken, and can then be assigned to an underlying catalogue. The disadvantage of this approach is that it only provides intermittent results and is a manual, resource and labour intensive process.

#### **With the aid of point-of-sale data – ‘The indirect approach’**

This method automatically collates data from merchandise management systems. Its advantage is that OOS information can be accessed more frequently. In addition, this information can be used to measure the performance of sales outlets on a permanent, continuous basis, up to the daily level.

The data collection and calculation method used to determine the rate is dependent on the capabilities, systems and technology in place within an organisation. It also relies on the sharing of timely and accurate data between suppliers and retailers.

As each approach measures different aspects of OOS rates, clear definitions are needed to facilitate communication of the measure by retailers to suppliers.

Retailers and suppliers need to focus their attention on a number of additional key elements when developing a common method. They should strive for:

#### **Be aligned on true root causes**

Manufacturers cited forecasting inaccuracies (19%) as the single most significant reason for OSA issues, while retailers stated their most significant reasons as problems in ordering (19%) and supply availability (18%). These differing positions make it very difficult to identify areas needing improvement and executing change. Members of the industry must be aligned in their perception of true root causes and their relevance, in order for there to be a stable platform to anchor OSA improvement activities.

#### **Share information and collaborate**

Suppliers and retailers need to share information to help identify root causes. This should include the sharing of existing data to measure OSA. Information sharing should also occur during various consumer planning activities such as forecasting and promotional planning. Comparing sales and demand at appropriate intervals should be a focus moving forward. Establishing common guidelines can help the industry to work together to improve OSA.

Information sharing can be facilitated by improved collaboration. This will put an end to the blame game and allow genuine progress to be made. The survey results highlight the importance of alignment in the future direction and priorities of OSA. Seventy-five percent of respondents support the need for industry-wide or supplier–retailer initiatives in order to make significant in-roads into this complex and dynamic issue.

## Unilever – OSA collaboration in action case study

On-shelf availability (OSA) is an industry problem requiring industry collaboration. The vision of the Unilever Global Customer Service Excellence (CSE) program is to 'Be famous for on-shelf availability in the industry'.

We can achieve this by creating an integrated approach across our business and with our customers, which identifies the key drivers of out of stocks (OOS) at shelf level and provides solutions for improving OSA.

Unilever has been conducting OSA pilots with major customers in many countries including Wal-mart, Kroger and Target in the US; Somerfield, Sainsbury, Tesco, Wal-mart and Boots in the UK; Tesco in Thailand; and Carrefour in Arabia. Using the knowledge gained from these successful pilots enables other pilots to take advantage of proven methods.

When creating a pilot, it is important to understand and align both supplier and retailer strategies such as increase sales, reduce OOS and cut costs in the supply chain. Improved OSA can then be used as a method of delivering these strategies.

It is also important to agree on the methodology of the pilot including where the pilot takes place, the number of store visits, the duration of data collection, agreement of definitions for data collection, OSA measurement and root cause categories.

Products to pilot should be chosen based on questions such as whether the product is:

- A market leader
- In a highly promoted category
- In a known problem category within the retailer's supply chain
- In a fast-moving/high-volume category.

Once product data is collected, it can be used to create a loss tree to understand key loss areas. In order to obtain accurate root causes for OSS it is beneficial to obtain access to 'back of store' (BOS) and store ordering data.

Another important step is to identify key barriers and findings that assist modifying the processes, if necessary, and rolling out to other stores.

For the Unilever pilot conducted earlier this year, data was collected by checking shelves during or after peak shopping periods and recorded on data collection sheets. Any item with zero units on shelves were marked as OOS and a root cause analysis process followed.

During the pilot, no attempt was made to rearrange shelves or advise staff of overfacing, to ensure accurate data was recorded. Access to BOS data, store order data, DC SOH data, DC issues data and POS data was essential to complete root cause analysis.

To improve the pilot, brainstorming sessions should be held with relevant stakeholders following data capture and root cause analysis. The sessions will identify the activities that need to take place in order to improve OSA in the areas that either provide a quick win or enable focus on the larger loss areas.

It may be appropriate to capture more data during the implementation phase and also after the improvement activities have been implemented. The initial data capture shows the 'before' picture and subsequent data collection will define the extent of success.

Best practice should be shared and communicated between business functions and across different stores.

## 6.2 Next steps in the journey

Based on these recommendations, formulated by the working group, the following initiatives were approved by the ECRA Board. They are immediate action points to be developed during 2008–09. This will ensure the momentum is maintained to leverage from the survey results and achieve industry-wide improvements.

These initiatives form one of many components of the next steps in the OSA journey. In order for significant gains to be achieved, these initiatives need to be

supported by an industry strategy. This will ensure the outputs of these initiatives are successfully implemented by the industry.

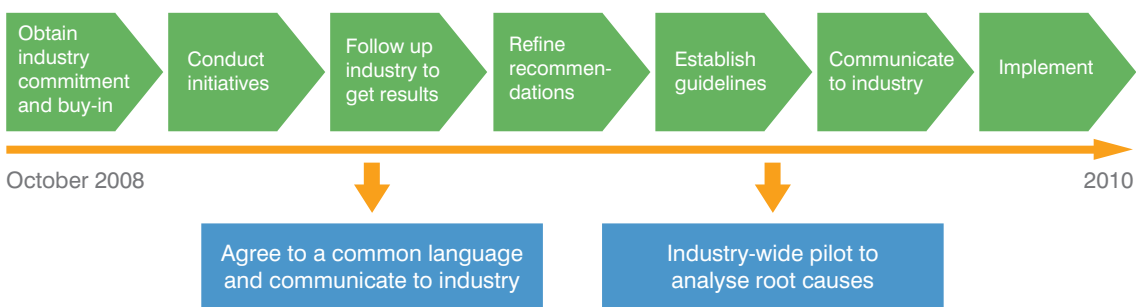
A proposed roadmap to success has been developed to plot out the recommended next steps towards the improvement of OSA.

These initiatives form the beginning of the journey. They need further commitment from the industry to create much-needed, industry-wide standards and improve OSA performance.

**Figure 20. Outline of the key Industry initiatives from this study**

| Initiative                        | Action   |
|-----------------------------------|--|
| Develop a common language         | <ul style="list-style-type: none"> <li>Identify a group of participants and establish project team.</li> <li>Identify existing data sources (basic data-points) that can be shared across the value chain.</li> <li>Collate existing methods for measuring from project team members.</li> <li>Compile a set of leading measurement practices.</li> <li>Agree on a common language and communicate it to the industry.</li> <li>Define the timelines.</li> </ul> |
| Be aligned on true root causes    | <ul style="list-style-type: none"> <li>Create a group (ideally made up of two representatives from the suppliers' sector and two representatives from the retailers' sector).</li> <li>Run a pilot to understand OOS root causes and relevant issues along the supply chain.</li> <li>Use the results of this pilot to develop a protocol for an industry-wide pilot.</li> <li>Develop a toolkit to identify root causes.</li> </ul>                             |
| Share information and collaborate | <ul style="list-style-type: none"> <li>Share existing data.</li> <li>Define common guidelines for forecasting and promotions planning.</li> <li>Compare sales and demand, at appropriate intervals/front and back end of interfaces.</li> <li>Create a planning methodology that includes process and allowance for change.</li> </ul>   |

**Figure 21. Industry roadmap**



On-shelf availability (OSA) has always been an issue for the Australian and New Zealand food and grocery industry. For the first time the industry looks set to really tackle the underlying issues of out-of-stocks (OOS) by working together to improve availability levels.

The Efficient Consumer Response Australasia (ECRA) Board, Accenture and the contributors to this report agree that supporting the future work program recommended in this report will not only improve the industry's focus on OSA but will also drive consumer satisfaction levels.

We strongly encourage your participation.

