

A woman with blonde hair, wearing a black sleeveless top and a black skirt with a white polka-dot pattern, is smiling and using a handheld barcode scanner. She is holding a small product box in her left hand. The background shows shelves stocked with various retail products, including boxes and bottles. A computer monitor is visible in the foreground on the left.

## Retailing gets smarter: Moving forward with standards and technology





# The Global Language of Business



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# Retailing Gets Smarter



## Foreword

This paper looks at the business of retailing; the drivers and the issues, and how retailers are addressing them. Specifically it addresses how retailers are improving their businesses through the use of global GS1 supply chain standards and technology.

Is retailing simply about supply and demand? How critical is the profit line in driving long term change within a company? There are many varied models of this simplistic view of retailing contained within a single manufacturer to retailer model. Every retailer faces individual challenges ranging from how orders are received and processed, to how physical goods are transported within the supply chain.

The business of retailing isn't always easy. Daily pressures are weighted against trying to achieve monthly and annual targets. The problems associated with data management are often not high on the priority list for senior management. So why bother now? Why is it suddenly so important that time, effort and money need to be diverted to fix data related problems? That's simple. Can you afford to let your competition pass you by? If you look closely, are there areas of your business that could be fixed or improved through the adoption of best-practice processes and global standards?

It always seems that whenever you read about industry making changes, it's the big retailers who are doing everything, or at least making it public. So what about the average retailer who doesn't have a lot of stores (comparatively)? Does this translate into savings for them? The good news is "Yes". Retailers such as The Reject Shop, Spotlight and SuperCheap Auto have all made significant investments in various areas of eCommerce and are beginning to see the real benefits of this work.

The future of retailing will inevitably alter for all participants. With an ageing population, rapid adoption of emerging technology and new global market forces, among other issues, the ability to move with this change is important. Retailers have a choice: they can drive change, or be driven to adopt change in order to try and keep up with the competition.

It is clear the consumer of 2010 and beyond will be far more technologically savvy. The expectation that information should be at their finger tips is a fast growing reality. Sharing information in order to be better informed or to have faster access to goods will be normal.

The changing dynamic of the emerging consumer means that retailers have to be nimble and prepared to change with the times. It is inevitable that the supply chain will change in order to support these developments. To what extent this is consumer driven or retailer driven will be determined by how retailers shape their supply channels over the next three to five years.

Greg Milne

Chief Executive and Managing Director  
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\* BRAZIN brands include Sanity Entertainment, Virgin Entertainment, HMV, BNT, Diva and Dusk

# Executive Summary



Retailers are set to make savings every bit as impressive as those ushered in by bar code scanning during the 1980s with eCommerce technology and systems that leverage the very same system – GS1.

Electronic commerce (eCommerce) based on GS1 standards saves money by stemming the flood of paperwork – orders, invoices, proof of delivery and so on – and associated errors that cost retailers millions of dollars each year to process.

The results are proven. This report details how retailers like Supercheap Auto and the Reject Shop have made real-world efficiency gains. Among them are:

- Reduced paperwork
- Faster turnaround times on orders
- Increased order accuracy
- Improved inventory control
- More accurate and efficient store receiving processes
- Higher on-shelf availability
- Greater accuracy and visibility of stock throughout the supply chain

The impact on the bottom line is impressive. Fewer out of stocks means more sales and increased market share, the elimination of data entry errors translates to fewer disputes and faster payment, while leaner inventories free up capital and restore cashflow.

These high level benefits reflect the very practical ways in which eCommerce simplifies the way retailers like you do business. For example, electronic receipt of goods at stores can halve the time it takes to work with paper-based forms and faxes. Electronically scanning your deliveries automatically tells you, the driver and the supplier what has been received. Your employees will no longer waste time counting cartons and chasing down discrepancies.

The key is the GS1 System. Beyond the familiar bar code are tools like the EANnet data pool (becoming GS1net in August 2007) that allow you to efficiently communicate with suppliers – eliminating most paper-based forms and the errors that come with them. The GS1 System also underpins greater visibility of stocks. Equipped with accurate, real time inventories, you enjoy greater control over inventory levels and fewer stock outs. This means better service for your customers, elimination of rain checks, plus significant cost and time savings.

Assessing the benefits of eCommerce for your business is straightforward with GS1 Australia's help. A not-for-profit industry body, GS1 Australia offers expert assistance and advice unbiased by commercial interest. Members can take advantage of specialised training, a complete supply chain review, project management services, education opportunities, and industry specific working groups where challenges are resolved in a collaborative environment with your peers.

Part of the global GS1 network, GS1 Australia is always up to date with the latest international developments and emerging technologies; connected with the world's leading experts in supply chain management.

As eCommerce becomes a reality for an increasingly large number of Australian businesses, this is the time to think strategically and position your business among the retail industry's most efficient.



# Retailers Driving Change - Case Studies



**Retailer:** SuperCheap Auto (AU & NZ)

**Number of sites (2006/7):** 173+

**Reported Annual Turnover:** \$ 240M

SuperCheap Auto is moving the Automotive Aftermarket industry forward with eCommerce and data synchronisation by taking a leading role in the development, testing and implementation of a tailored data synchronisation solution for their industry.

Having expanded their stores and range significantly over the past decade, failure to plan for the future would have been a risk that could potentially slow their ability to expand further.

By leading the way SuperCheap has been able to capitalise on these supply chain developments and they have a stable eCommerce platform for many years to come.

Benefits realised:

- Reduction in paperwork
- Better order turn-around times
- Increased order accuracy
- Improved inventory control
- More accurate and efficient store receiving process
- Improved on-shelf availability

## THE REJECT SHOP

**Retailer:** The Reject Shop

**Number of sites (2006/07):** 119 + 2DCs

**Reported Annual Turnover:** \$237M

Over the last few years, The Reject Shop has implemented the use of global GS1 standards for mostly internal applications.

The use of Global Trade Item Numbers (GTINs) and Serial Shipping Container Code (SSCC) labels to assist in the tracking and movement of stock throughout the chain. All outgoing pallets are effectively tracked as a result of correct and automatic identification.

The opening of a new distribution centre (DC) in the 2007 financial year has been further supported by the implementation of systems and processes using these GS1 numbering standards.

Benefits realised:

- Reduction in paperwork
- Greater accuracy and visibility of stock throughout the supply chain
- Effective asset tracking from DC to Store

# Key Drivers for Change in Retail



Whilst your current business processes may be serving you well enough today, doing business is about responsiveness to an evolving market where expectations, variables and sophistication are ever increasing.

Nearly every business in operation today has business processes that contain internal 'workarounds' – a quick temporary fix used until something better can be implemented. Even the largest retailers have systems and processes that rely on some workaround to function. These temporary fixes cost money. By removing, or at least reducing, these inefficient processes you will reduce the cost of doing business.

Below are some of the many reasons why any company would want to change and begin looking at GS1 standards as a solution:

- **Creating a competitive advantage:** In many cases, through clear differentiation, consumers can be 'educated' as to what a particular retailer has to offer that others within the same category don't.
- **Making it easier for team members:** Simplifying processes mean re-training can be done faster and at less expense. For example, a store that introduces electronic receipt of goods may halve the time it took to do manually and remove a number of error-prone steps. Removing laborious and non-value adding tasks can assist in reducing staff turnover; a continual challenge for nearly every retailer.

- **Maintaining margin:** Some margin 'eroders' are difficult to reduce, however if simplified processes in a warehouse are safer and faster, for example, then it may be possible to reduce Workcover premiums or even wages. By reducing the cost of doing business, margins can be maintained and improved over time.
- **Improving the availability of stock to help cash flow:** Retailers can improve their in-stock position and make the best use of available floor space within a store through improved stock management.
- **Shrinkage management:** Being able to quickly and accurately identify abnormal stock fluctuations can mean the difference between a profitable day/week/month and high losses. Emerging technology can provide retailers real-time visibility of stock on the floor. This same technology can complete a stocktake for thousands of items in just a few hours.
- **Growth into new markets:** Expanding into a new market can be challenging and daunting. Having sound eCommerce practices in place may not necessarily be a 'contract-winner' but it may improve the odds when compared with a competitor who isn't as advanced in eCommerce operations.
- **Transportation optimisation:** By sharing carton and pallet information with a trading partner and transport company, it is possible to optimise truck loads and therefore reduce petrol and transportation costs.

These are by no means all the possibilities of what eCommerce could do for retailers and suppliers alike. There are many others, and many supporting case studies to show what can be done. It is very important to note, that all of this can be done in small, manageable stages over time. It is also critical that processes and training are updated along with changes in technology.

One without the other is an equation for disaster.

Situated at the coalface of the customer-facing supply chain, retailers can suffer from the cumulative effect of errors back upstream along the supply chain and, using this argument, it is retailers who are most at risk from their impacts if not addressed.

Any supply chain can be improved through deployment of part or all of the GS1 System components. An intelligent and efficient supply chain is one where the trading partners are using information to expedite the movement of goods and the collaboration of business processes. The GS1 System provides the necessary platform for this to occur seamlessly and where necessary, globally... by applying quality initiatives and technology to the supply chain processes.



# Electronic Business & the GS1 System



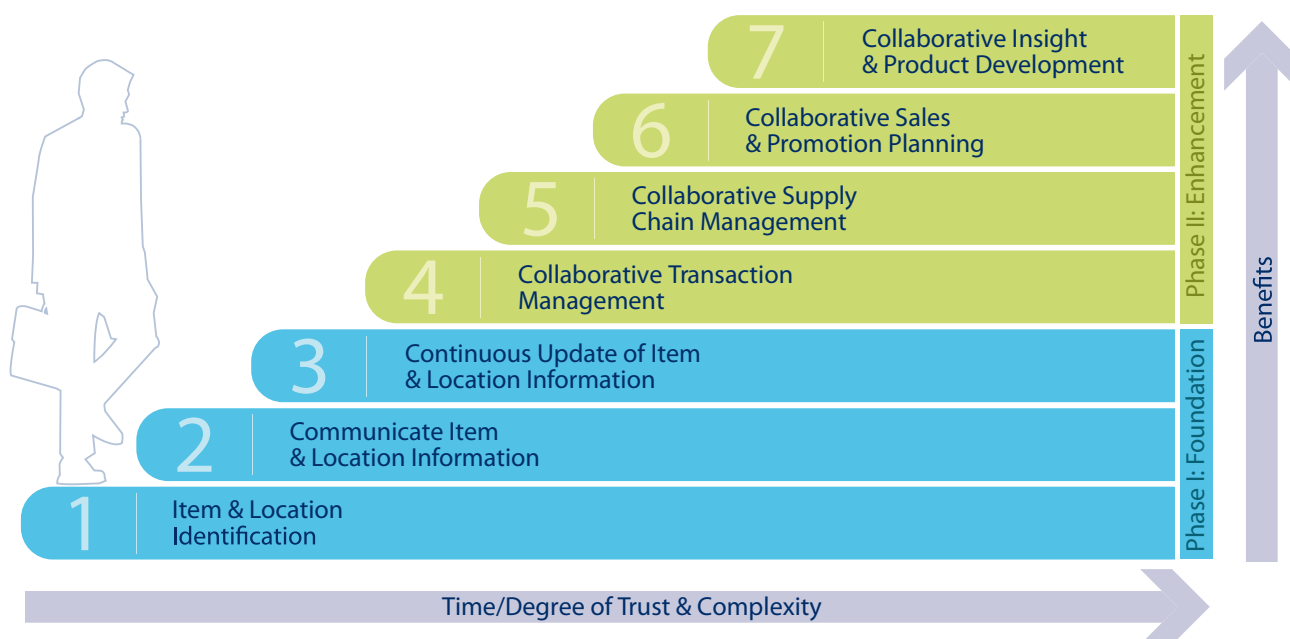
Business has gone electronic. You may have heard terms like eBusiness, eCommerce, supply chain management or global trade management, whatever the buzz word it's all about improving the value of your business.

The knowledge derived from data, drives business decision making from strategic market positioning, product research and development, strategic procurement, optimised distribution models, promotions, inventory management, category management...and so on.

The ability to capture, share, manipulate and analyse data, in order to gain knowledge about not only what is happening within your own business but across the entire trading network in which your business operates (including competitors) is a very powerful business tool. Today's companies need access to information that is meaningful and useful across company boundaries, to adapt, survive and flourish. To achieve this, the data needs to adhere to multi-industry global standards – and that is the GS1 System.

Retailers are using the GS1 System as the information backbone of strategic and operational supply chain collaboration with trading partners, resulting in significant benefits which have been well documented.

## The Steps to Collaborative Commerce



The two phases needed to achieve successful collaborative commerce implementation:

- **Foundation** – The 3 building blocks essential for Collaborative Commerce
- **Enhancement** – The next 4 steps which build on phase one for additional benefits

# How GS1 Can Help You Profit from eCommerce



## GS1 Global & GS1 Australia

GS1 Australia is the local administrator for the internationally recognised GS1 System of standards (formerly known as the EAN-UCC System) which are used in 155 countries by well over one million member companies in virtually every sector of the economy.

GS1 Australia is one of 108 similar member organisations globally and is recognised by its peers as one of the top five GS1 organisations.

As the Australian authority for the GS1 System, GS1 Australia issue members with unique GS1 Company Prefixes used to form numbers that are most commonly shown in bar codes on products and shipments, and are also used in electronic messages such as orders, invoices and despatch advices.

GS1 Australia works with 18 different industry sectors; developing levels of assistance and advice on how to implement the GS1 System and standards. In many cases not every aspect of the system is required. In nearly all cases each industry has different requirements and is at a different stage of adoption, ranging from Grocery, General Merchandise, Entertainment and Apparel sectors, to Defence, Hardware and Healthcare sectors.

## The GS1 System

The GS1 System is a set of global standards, which enable the unique identification of all trade items, processes, services, shipments, assets, companies and locations at any point in the supply chain. The system can be used by any industry to facilitate trade by combining unique identification numbers with data carriers (i.e. bar codes) and electronic commerce processes.

The GS1 System is a set of universal global standards - so all users follow the same coding rules. As a result, GS1 numbers and bar codes can be recognised by trading partners anywhere in the world.

The GS1 System is administered by GS1 Global, based in Brussels. To ensure GS1 numbers are globally unique and the correct standards based implementation support is provided to local GS1 user companies, GS1 has authorised one GS1 Member Organisation in each country to manage the GS1 System.

GS1 Australia administers the GS1 System and is the only official source for GS1 bar code numbers and standards in Australia. The GS1 bar code numbers allocated to companies by GS1 Australia begin with the prefix 93.

The GS1 System offers benefits to all parties (trading partners, manufacturers, wholesalers and retailers) in the trading cycle by reducing costs, saving time, and increasing accuracy and efficiency through management of the entire supply chain.

## The National EPC Network™ Demonstrator Project Extension

In June 2007, a consortium of 13 organisations led by GS1 Australia and RMIT University released the results of a pilot which examined the business case for RFID.

The pilot proved how reliable and accurate RFID systems can be set up and what businesses need to consider when examining how this technology may benefit their business. Among the learnings are ways in which SME businesses can minimise the cost of implementing RFID through leasing arrangements and global standards. Benefits included stronger relationships with trading partners, productivity gains by eliminating paperwork and human error, more accurate inventory control and open visibility across the entire supply chain.



# How the Components of the GS1 System Interrelate:



Historically, BarCodes are the first component of the system adopted, primarily so retailers can scan trade items through the Point-of-Sale (POS). Some of the initial benefits retailers gained were the elimination of item price marking, the automatic real time identification of items sold thus real time sales figures and auto-triggers for replenishment to minimise risk of stock outs. This paper will present further benefits of GS1 BarCodes to Retailers; benefits that forge way beyond the POS application and present how retailers are using GS1 BarCodes in conjunction with other GS1 components, to achieve far reaching benefits.



Today, as companies adopt a more holistic and strategic approach to the value they can both extract from, and add to, their supply chains the Global Data Synchronisation Network (GDSN) is becoming a fundamental prerequisite.

Data synchronisation simply means that all trading partners are running their businesses using the same quality data, thus removing discrepancies, claims, wrong shipments and delayed payments that are associated with incorrect/incomplete data. It is about trading with an agreed version of the "truth".

EANnet (soon to be superseded by the GS1 net Data Pool) is the Australian platform for accessing GDSN and already used by well over 1200 companies to securely share supply chain data including product identifiers, product dimensions, images and pricing data



Once the business master data foundation is laid, then dynamic business transactions can occur electronically using clean, accurate data. GS1 eCom provides the transactional standards that enable businesses to exchange and integrate purchase orders, invoices, advanced shipping notices, remittance advices and many other electronic business documents.

GS1 eCom includes both EDI and XML standards with implementation guidelines already developed for many industry sectors. GS1 Australia has also developed a message validation service called CMT (Community Management Tool) which allows companies to create and test both industry &/or company specific message formats in a secure, pre-production environment.

Companies also use GS1 experts to develop eCom strategy often involving support for EDI and emerging XML requirements.



EPCglobal is the next quantum leap in integrated supply chain standards and technology. Electronic Product Code (EPC) is for those retailers and manufacturers who are ready to make the next significant leap in data collaboration. EPC and Radio Frequency Identification (RFID) form the basis of the EPC Global standards. For more detailed information use the following link: [http://www.gs1au.org/products/epcglobal/system\\_basics.asp](http://www.gs1au.org/products/epcglobal/system_basics.asp)

In the context of this paper EPC represents the final step in trading partner collaboration and it is now emerging as a new global standard.

Please refer to the GS1 Australia Services brochure for a wide range of services to implement the GS1 System or visit [www.gs1au.org](http://www.gs1au.org)

# How to Increase Your Retail Value



The key to increasing your retail value is identifying and realising opportunities for improvement within your business.

We often hear about “world’s best practice”. This term may sound like a theoretical nirvana to some, or perhaps out of reach for others. In reality, no company ever leaps from current practices to optimal in a single step. It is likely that on reaching your perceived best practice, there is still room for improvement as the definition of best practice is also advances.

Improvements will occur incrementally, but they take planning and collaboration with your trading partners. Benefits lie in the prioritised adoption of what best practice is for your business, so that you can stay ahead of the competition and improve at a greater rate.

Let’s look at some of the retail levers for increasing your retail value, and then at how retailers are increasing their retail value using electronic business to address these areas:

## Increasing Revenue

### Increase market share

Implementing synchronised data with trading partners and aligning data can lead to the following types of benefits:

- Improved inventory availability at the retail level
- Reduced store out-of-stocks (OOS)
- Improved time-to-market
- Improved customer service
- More sales to existing customers
- More new customers

### Increase volume through existing supply channels

- Trading partners that implement a robust and complete eMessaging system, also known as B2B, can expect to achieve similar benefits to data synchronisation (see above).

### Increased application of market intelligence

- By applying and using accurate POS data, partnerships will see a vastly improved utilisation of market intelligence. Retailers can be ahead of the ‘trend curve’, not at the bottom of it, by translating intelligence into pro-active actions.
- By sharing POS data with manufacturers, with the aim of improving the relationship.
- Through the better use of market intelligence tools such as AC Nielsen\*, Aztec\*\*, ABS\*\*\* which can add value to discussions and analysis, especially where negotiations are concerned.

\* <http://au.acnielsen.com/site/index.shtml>

\*\* <http://www.aztec.com.au/SynovateAZTEC/DataAgencyServices.html>

\*\*\* <http://www.abs.gov.au/>

## Increasing Capital Efficiency

### Reduce cost of goods sold

- Reduce warehouse, distribution and transportation costs through more effective use of GS1 global standards and Warehouse/Transport Management Systems. These systems use standardised data cleansed through an industry approved, data matching process to further reduce data errors.

### Reduce cost of doing business (CODB)

- Process redesign of manual processes and steps, such as data entry and order entry, via GDSN will effectively reduce man hours for these tasks.
- Reduce inventory handling costs through the electronic receipt of goods from suppliers.
- Improvements within the storage and distribution of goods processes should reduce inventory levels. This will lead to an improved cash flow as less days stock cover is required. Whilst the percentage estimates in this area are low (up to 1%) this can still equate to significant money being freed up.



## Traceability, Regulations & other Compliance drivers

### Traceability drivers

Traceability in supply chains is becoming one of the greatest drivers of change the globe has seen in the past decade. Issues such as Mad Cow and Bird Flu have added to already growing worries around product tampering, contamination and counterfeits, and lead to sweeping changes being rapidly introduced by governments around the world.

Traceability can also mean to have or obtain full visibility throughout the supply chain of a product or shipment. Whilst we firstly think of food as the big issue, recent product recalls of new Holden vehicles (November 2006) highlight that nearly all 'products' require some level of traceability. Certainly the Pan Pharmaceuticals incident in 2003 (reputed to be the largest product recall in Australian history) is an example of how critical traceability can be.

### Regulations & other compliance drivers

Date driven compliance is a compelling business case driver with government legislation or regulatory requirements often a real and unambiguous reason for retailers to complete work. Recent changes to Country of Origin Labelling legislation are testament to this; retailers were forced to make expensive changes to comply.

Long term business strategy also plays a part in determining retailers' requirements. For example, Gillette (Procter & Gamble) are working with trading partners and performing trials using GS1's EPCglobal standards and RFID technology in an attempt to gain better information on high value items within the supply chain. Many companies see RFID as a medium to long term strategy.

The most common reason that projects are undertaken is to comply with a demand or request from a trading partner. In some cases these are simply done to further develop the trading relationship. In other cases work is done to enhance collaborative strategies for mutual gains. For example: The Coles Group request that suppliers become EANnet Ready to synchronise product data electronically via EANnet.

Current GST legislation puts the onus on retailers to apply the correct tax rate on all items sold in their stores. A private binding ruling from the ATO means that if the retailer relies on EANnet for the tax rate he/she is not liable for any errors, adjustments or penalties that may otherwise apply.



# Collaboration: Increasing Trading Partner Value



There are a multitude of advantages for retailers and suppliers to collaborate on industry and individual requirements.

Open collaboration will often lead to far closer trading relationships being formed. Many retailers and manufacturers realise a faster rate of growth when collaborating (for example, on promotions) which in turn can drive:

- Better on shelf availability
- Improved logistics efforts
- Better sales
- Improved margins

By choosing to work with a trading partner, you are more likely to create an atmosphere of sustainable growth through better use of industry standards. By understanding the business processes of your trading partners, you can collaborate with them to help reduce supply chain costs, instead of inadvertently adding to them.

In many instances collaborating with your 'competitor' is seen as a negative (for obvious reasons). However, this competitive nature can often be put aside when it comes to trying to remove inefficiencies from an entire industry. Industry leaders working together have a far greater chance of success than individuals working on proprietary solutions. Effective collaboration can see the total worth of the 'pie' grow for everyone, rather than just scuffling for more of the available 'slices'.

Take the Health Industry as an example, where government, GS1, manufacturers and hospitals are working together to find the best common solution for the whole of the industry. By using the FMCG industry as a template, many key players determined saw the value in using a collaborative approach to solve the problems they had identified. These ranged from having separate state based processes and systems, to having different data contained in those systems for the same items. The process of data cleansing and synchronising data amongst trading partners has assisted in a smoother transfer of information between them.

All of these points mentioned above, foster a 'goal' or 'desire' to work with trading partners and create a long term, viable trading relationship. By working on creating better value with your trading partner you can avoid shifting costs throughout the supply chain and actually remove them altogether. Using GS1 standards as the foundation for this collaborative effort will ensure everyone is speaking the same global language. Maximum benefits are only derived when everyone adopts the agreed changes together.

"According to the ARA, Australia's small to medium retail sector could achieve a total improvement of \$1.5 Billion per annum through the implementation of standards based electronic business practices"

"Adoption and implementation of these voluntary global standards, will set the foundations for true efficiencies brought about by the adoption of eBusiness principles and will provide all trading partners with benefits including increased revenue and productivity gains, working capital reduction and customer satisfaction"



# So What Does All this Mean for You, the Retailer?



Invariably, nearly every retailer model or individual retailer would have already put considerable effort into some kind of eCommerce strategy. It may have been to set up an eCommerce platform to send Purchase Orders via Electronic Data Interchange (EDI), or to complete EANnet as the foundation for larger projects. Additionally, you may be thinking of global implications on how data is exchanged for export/import reasons.

## Information, training & advice

No matter what stage you are at, or what aspect you want to implement, GS1 Australia is well positioned to provide real assistance and free advice to add value to your current work. Remember, you have the ability to tap into the global GS1 network with many member organisations around the world facing similar issues and working through the same solutions.

GS1 Australia can also tailor training for your company, complete a Supply Chain Review, manage projects for large or complex projects, and educate people as to the benefits of an integrated Supply Chain model.

## Test your supply chain processes

Often people get a fuller appreciation of what can be gained in their own sector after they have taken a tour of GS1 Australia's Supply Chain Knowledge Centre (SCKC), a real-life, interactive model of a working supply chain. Many companies chose to take their supply chain and buying groups through the SCKC to give them a broader perspective of the supply chain and a better appreciation of the consequences of poor data management on their behalf. By inviting your suppliers to see the SCKC, you are improving their knowledge and helping them to help themselves.

The SCKC can also be easily customised to simulate your very own supply chain. This allows you to test alternative strategies and see for yourself the benefits of synchronised data and can be achieved through the adoption of GS1 standards.

For more information on these and many more service offerings, our Member and Industry Services Team at GS1 Australia can be of assistance. Additionally, retailers who are already Corporate Members have access to many of the services mentioned above as a part of their membership.

... are you getting the most out of your GS1 membership?

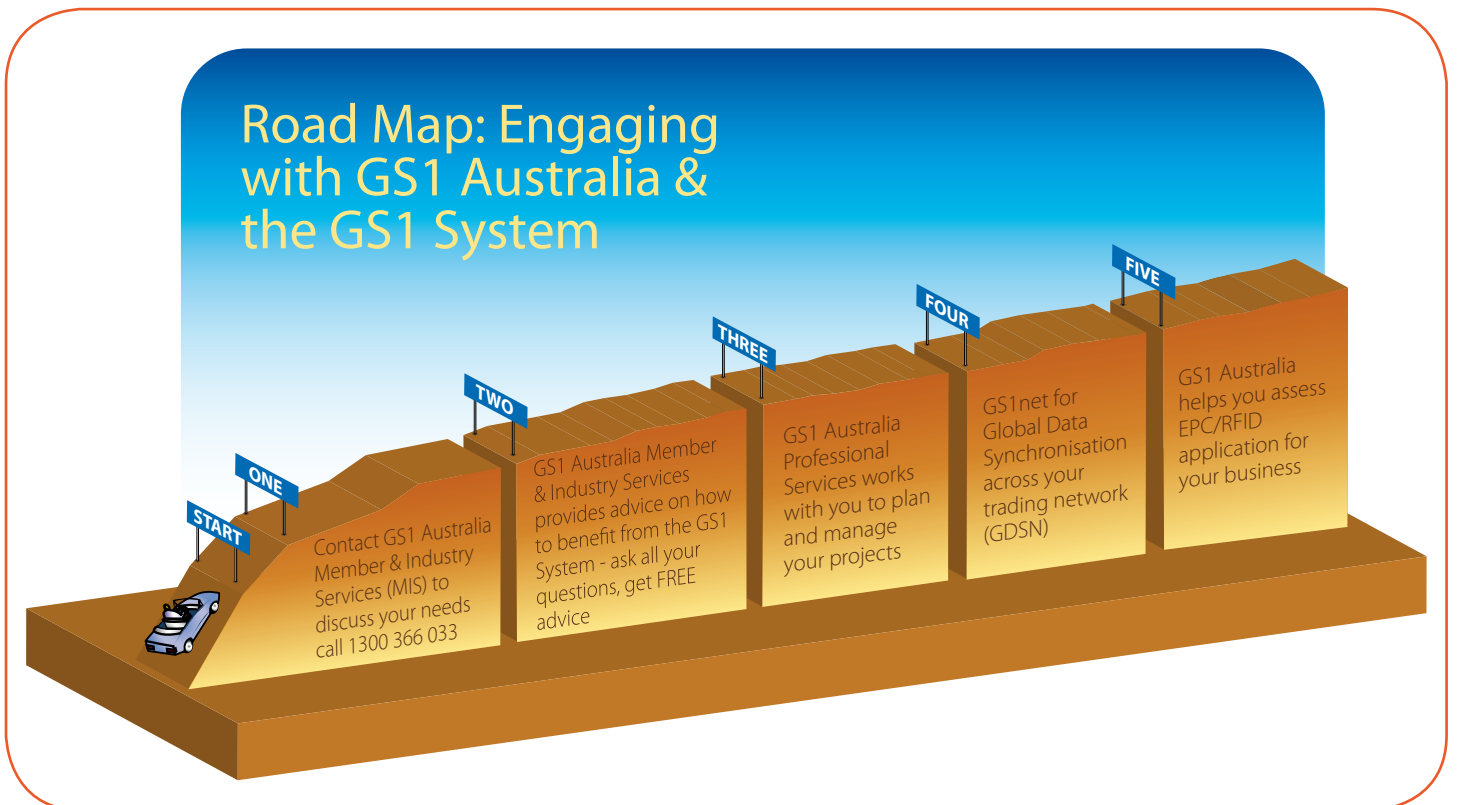


# Roadmap: Engaging with GS1 Australia & the GS1 System



As we have demonstrated, there are many areas of a retail business that can benefit from better information exchanged in electronic business processes. There is no fixed order in which your business should adopt improved processes or the GS1 standards that support them because your own best practice is exactly that, what is best according to your own business. However the 'roadmap' below, whilst not intended to be too prescriptive, gives some direction for those wanting to know where to begin.

GS1 Australia has a number of services and points of engagement for retailers, to collaborate with you on the journey. The roadmap has many options for getting to the desired destination – added retail value in your business.



# Glossary



<b>CODB</b>	Cost of Doing Business. Calculation that is used to determine the actual cost of providing goods.
<b>EANnet</b>	An Australasian internet-based data pool. Enables retailers and suppliers to share synchronised master data. EANnet will be superseded by GS1net in 2007.
<b>eCommerce</b>	Electronic Commerce.
<b>EDI</b>	Electronic Data Interchange. Term used to loosely describe how electronic messages are sent amongst trading partners.
<b>EPC</b>	Electronic Product Code. Effectively describes the standards in place for the application of RFID.
<b>GDSN</b>	Global Data Synchronisation Network. An interconnected network of interoperable data pools and a global registry, the GS1 Global Registry®. Enables companies around the world to exchange standardised and synchronised supply chain data with their trading partners.
<b>GS1net</b>	An Australasian Data Pool used by retailers and suppliers to securely share synchronised data amongst themselves and with 20 similar international communities linked via the GDSN.
<b>GTIN</b>	Global Trade Item Number. The global term that has replaced old terminology such as EAN, TUN and APN.
<b>POS</b>	Point-of-Sale. The last step in the supplier to consumer process, where an item leaves the retailer, and is hopefully scanned.
<b>RFID</b>	Radio Frequency Identification. A 'new' technology now available to retailers to enable tracking of items and assets throughout the Supply Chain.
<b>SCKC</b>	GS1 Australia's Supply Chain Knowledge Centre. A place where attendees can truly experience seeing how data is used within a best practice supply chain.
<b>SSCC</b>	Serial Shipping Container Code. The code applied to assets or pallets to uniquely identify its contents.

# Bibliography



Contact the Member and Industry Services Team at GS1 Australia for a copy of any of these documents.

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With the emergence of Global Data Synchronization (GDS), many have been quick to point out the links between it and RFID. A.T. Kearney states that "...without data synchronization between trading partners, the future in RFID will result in vast amounts of data being captured and exchanged – much of it wrong". What does this mean for organizations trying to implement RFID standards without taking GDS into consideration? And what impacts will it have on the global supply chain? Available online from: [http://www.cactuscommerce.com/whitepapers/default\\_e.asp](http://www.cactuscommerce.com/whitepapers/default_e.asp)

## ***Capgemini., 2006. 2016: The Future Value Chain***

The speed of change and a sense of urgency will drive the evolution of the value chain over the next decade. Is the consumer products and retail industry ready? This study, from the Global Commerce Initiative, Capgemini and Intel, defines a unique vision of the total value chain for consumer goods from manufacture to consumption. Available online from: [http://www.de.capgemini.com/m/de/tl/2016\\_The\\_Future\\_Value\\_Chain.pdf](http://www.de.capgemini.com/m/de/tl/2016_The_Future_Value_Chain.pdf)

## ***Capgemini Consulting., 2007. The Fine Art of Supply Chain Planning***

Companies mastering the supply chain planning process are more successful at building relationships with customers and suppliers. They have greater ability to respond quickly to variations in demand and supply in combination with best-in-class inventory management. This report draws from the results from a survey done by Capgemini Sweden on Supply Chain Planning with many large global manufacturing companies based in Sweden. Available online from: [http://www.capgemini.com/resources/thought\\_leadership/supply\\_chain\\_planning\\_study\\_2007/](http://www.capgemini.com/resources/thought_leadership/supply_chain_planning_study_2007/)

## ***CIES – The Food Business Forum., 2005. Implementing Traceability in the Food Supply Chain***

Implementation of traceability is obligatory for all operators in the food chain in the EU since 1st January 2005. A business must now be able to identify all of its food, food products and feed suppliers and all the businesses to which they have supplied food or feed to. The information needs to be systematically stored, and to be made available to inspection authorities upon request. A proposal to introduce a similar system was adopted in the USA (Public Health Security and Bioterrorism Act of 2002). These Guidelines, developed by CIES, contain specifications on processes, an explanation of how to align data and how to implement your system. Available online from: <http://www.ciesnet.com/2-wwedo/2.2-programmes/2.2.foodsafety.traceability.asp>

## ***ECR Australia / IBM., 2004. Data Integrity and Synchronisation – Building a foundation for industry collaboration***

This report was developed by a team of consumer packaged goods (CPG) manufacturers, grocery retailers and wholesalers brought together by Efficient Consumer Response Australasia (ECRA). The ECRA Board commissioned this work to facilitate progress towards full implementation of data integrity and synchronisation (DIS) across the Australasian grocery industry based on a single regional data pool, EANnet. It can be ordered from: <http://www.ecraustralasia.org.au/node/45>

## ***GCI / Capgemini., 2007. Global Data Synchronisation at Work in the Real World: Illustrating the Business Benefits of Global Data Synchronisation***

Retailers and Consumer Products Manufacturers Are Realising Tangible Benefits From Global Data Synchronisation - Increased Sales, Reduced Costs, Improved Productivity Are Among the Real-World Benefits Highlighted in New Study From GCI and Capgemini. Global Data Synchronisation (GDS) is more than just a vision. It is an existing practice, with rapidly growing adoption, producing measurable benefits for retailers and consumer products manufacturers around the world. The report features case studies from retailers and manufacturers, including AEON, Albert Heijn, The Gillette Company, Johnson & Johnson, Procter & Gamble, Unilever and Wegmans that demonstrate the actual business benefits of GDS. Available online from: <http://www.gs1nz.org/aboutGS1/News050310a.aspx>





***Grocery Manufacturers Association (GMA), Food Marketing Institute (FMI), Wegmans Food Markets, Accenture LLP and 1Sync., 2006. Synchronization – The Next Generation of Business Partnering: How leading companies are delivering actual results***

Research conducted by Accenture quantifies the benefits of global data synchronization for the first time, revealing that the advantages are likely to be even greater than initially projected. Lagging consumer goods companies must take advantage of early-adopter experience to kick-start their own programs, or risk being left behind. Available online from: [http://www.accenture.com/Global/Services/By\\_Industry/Consumer\\_Goods\\_and\\_Services/R\\_and\\_I/SynchronizationPartnering.htm](http://www.accenture.com/Global/Services/By_Industry/Consumer_Goods_and_Services/R_and_I/SynchronizationPartnering.htm)

***GS1 Australia, RMIT University., 2007. National EPC Network™ Demonstrator Project Extension (or NDP Extension)***

This report documents the challenges and learnings of a ground-breaking pilot led by GS1 Australia and RMIT University. A consortium of 13 organisations worked together to achieved paperless delivery, and electronic proof of delivery (ePOD), 100 per cent read rates using Gen 2 EPC/RFID tags, guaranteed visibility of assets along an entire supply chain, and productivity gains ranging from 14.3 per cent to 28 per cent when comparing new EPC/RFID-enabled processes with manual processes. The report includes information on how the cost of RFID can be minimised through leasing arrangements and the use of global standards so that SME businesses may consider the technology. Request a copy online from: [http://www.gs1au.org/products/epcglobal/australian\\_activities/demonstrator\\_project.asp](http://www.gs1au.org/products/epcglobal/australian_activities/demonstrator_project.asp)

***GS1 Australia., 2006. EPCglobal System Basics***

This simple brochure explains how EPC/RFID can benefit businesses - from the point of manufacture to the point of sale. Available online from: [http://www.gs1au.org/assets/documents/products/epcglobal/epc\\_sysbasics.pdf](http://www.gs1au.org/assets/documents/products/epcglobal/epc_sysbasics.pdf)

***GS1 (Global Office)., 2006. Keeping your business in synch: GDSN Retailer Benefits***

Available online from: [http://www.gs1.org/docs/gdsn/gdsn\\_brochure.pdf](http://www.gs1.org/docs/gdsn/gdsn_brochure.pdf)

***IBM., 2005. e-Business action in Retail: Making a business case for improved profitability using EAN•UCC standards***

This report was supported by the Australian Retailers Association and GS1 Australia (then known as EAN Australia). It includes case studies, identifying opportunities, potential benefits and challenges, understanding standards and how to develop your own business case.

***Microsoft., 2006. Supply Chain Management: Business Overview for Retail.***

White paper - Already highly complex, the supply chain of the future is going to look even more so as it copes with serving a greater variety of buying channels (store, internet, kiosk, telephone, mail order, TV, PC), delivering to more outlets (differing store formats, order and collection options, homes, pickup points) in potentially more countries, while managing more products from a greater number of sourcing locations. Available online from: <http://download.microsoft.com/download/e/2/b/e2b4227d-54a9-4c09-82b8-892f98d73b51/SupplyChainWP.pdf>

***Retail Systems Alert Group & Khimetrics., 2005. The Demand Driven Enterprise: Beyond Pricing***

The purpose of the 2005 survey is to create a baseline on the current state of pricing and demand practices in North America and across Europe. It is designed to reveal what steps retailers are taking to adopt demand-driven strategies and modernize pricing practices. In addition, the survey looks at how pricing decisions are currently made within retail. Available online from: <http://www.retailsystems.com/Index.cfm?PageName=RecentReports>

***TIBCO Software Inc., 2006. Leveraging GDS to Automate Data Synchronisation: Lessons Learned at The Clorox Company***

Integrating GDS has led to improved efficiencies throughout the order-to-cash process for Clorox. This paper describes the lessons learned and benefits gained from a product data synchronization initiative at Clorox that began in 2001. Available online from: <http://www.1sync.org/documents/news/Industry%20Studies/Clorox%20Case%20Study%20Final.pdf>



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