



Global Upstream Supply Initiative (GUSI) Overview





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- The Upstream Integration Model (UIM)
- Proven Benefits for Upstream SCM



Business Case for Upstream SCM





Business Case – Current Situation

Raw Materials & Packaging Suppliers

Distribution

Manufacturing



Manufacturers

Procurement

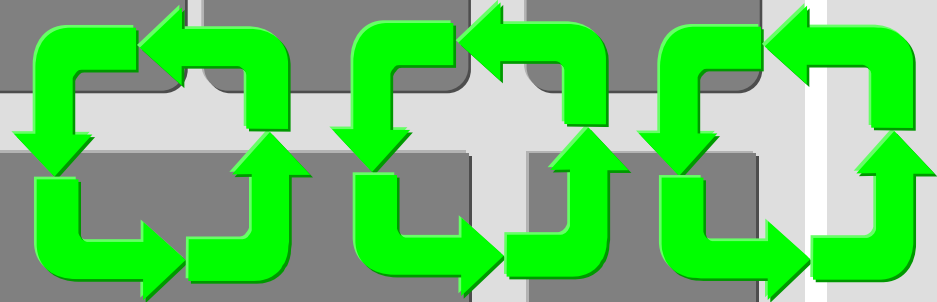
Supply Planning

Sales & Marketing

Manufacturing

Distribution

Retailers



Focus: manufacturing and replenishment plans

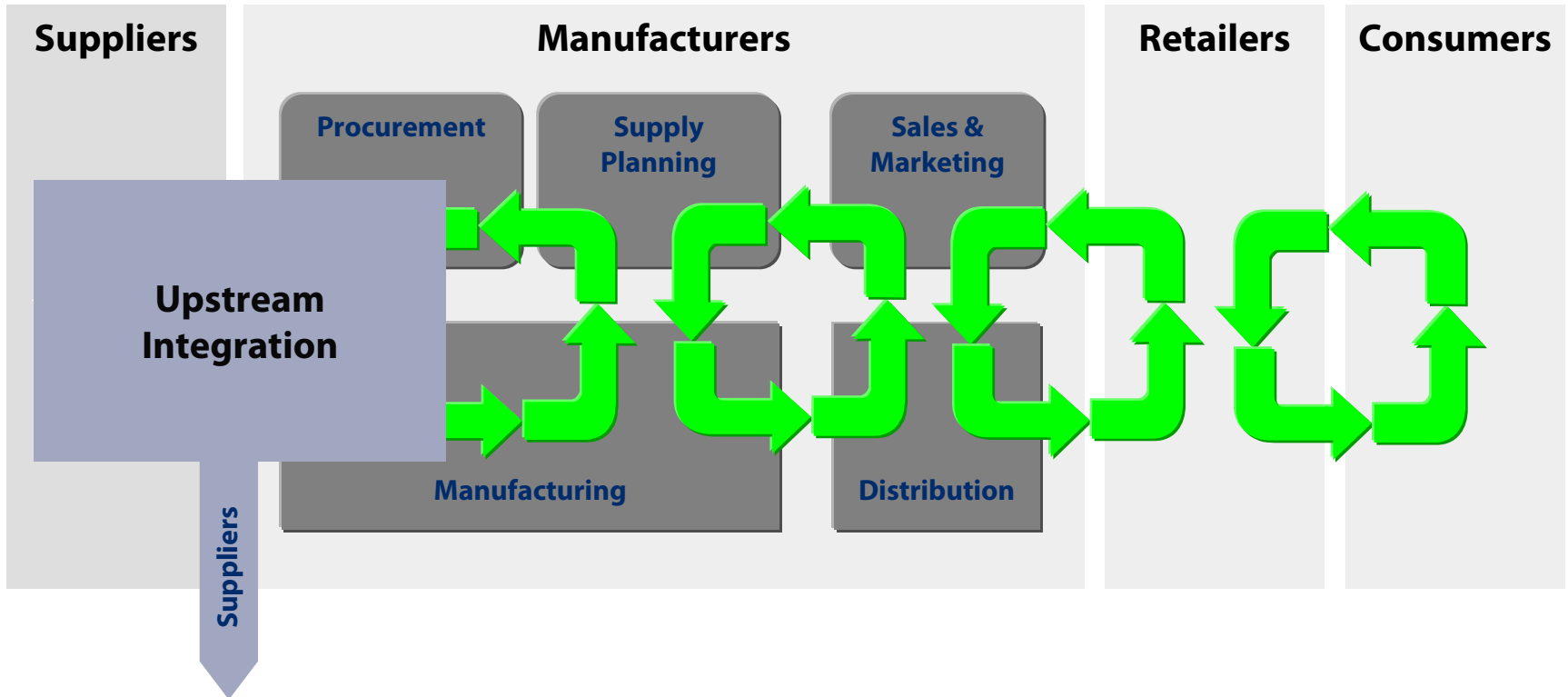
Raw materials and packaging into synchronised production

Focus: consumer demand

Consumer unit
Right product right place right time



Business Case - Expected benefits*

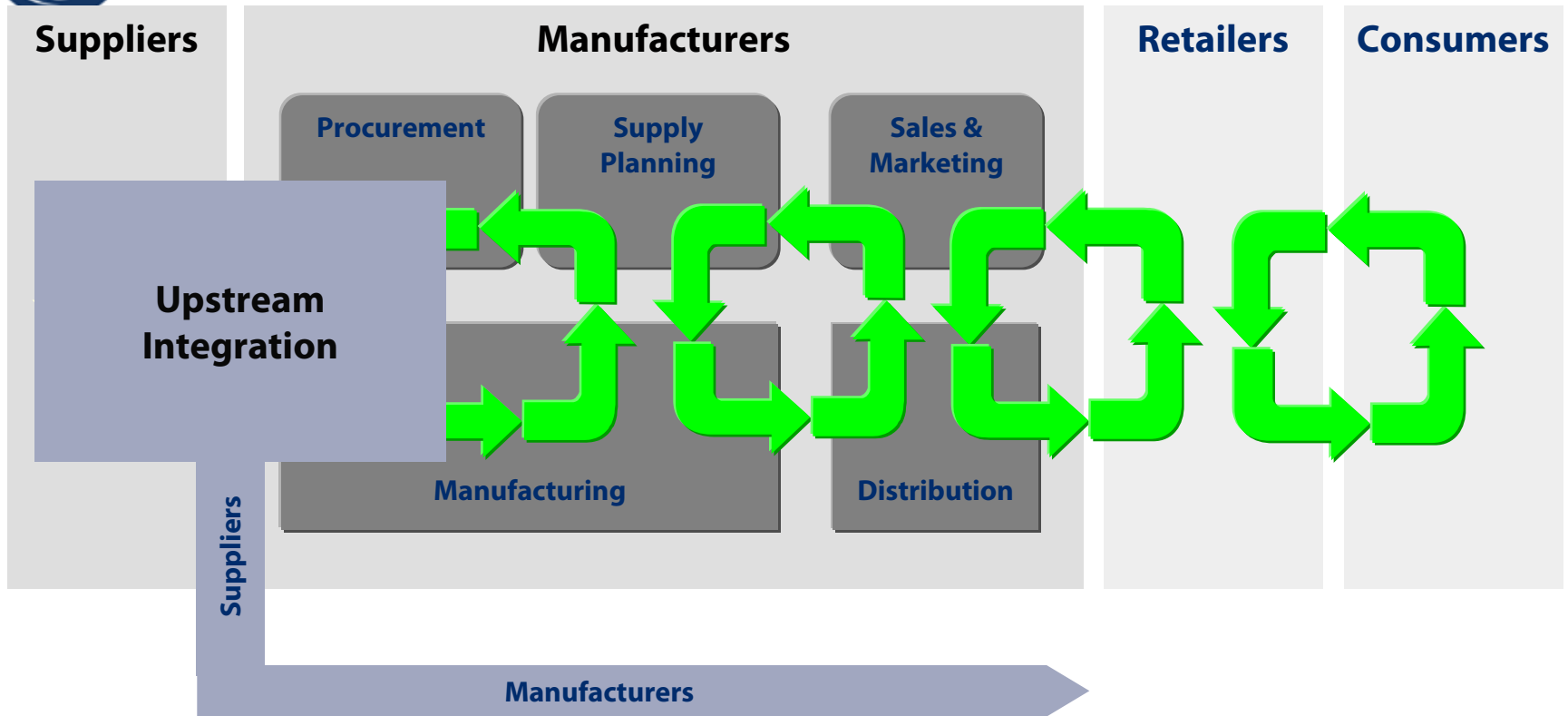


- Better visibility
- Optimised inventory levels
- Better supplier service levels
- Lower integration costs
- Optimised processes

* **Source:** GCI-GS1 Upstream webinar: Feb 06 Nigel Bagley, Unilever



Business Case - Expected benefits*

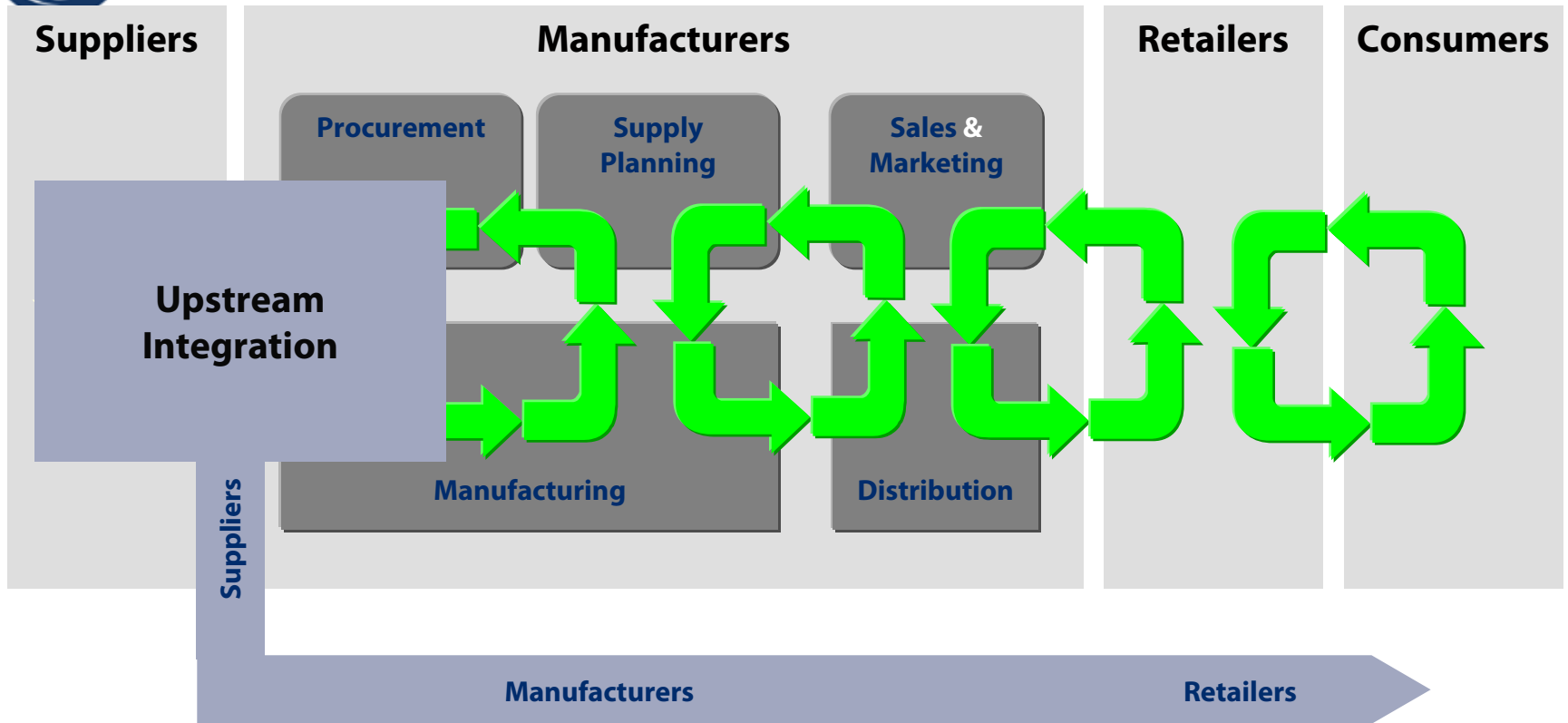


- Better visibility
- Optimised inventory levels
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- Increased retailer responsiveness
- Maximised production capacity
- Optimised inventory levels
- Reduced obsolescence
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Business Case - Expected benefits*

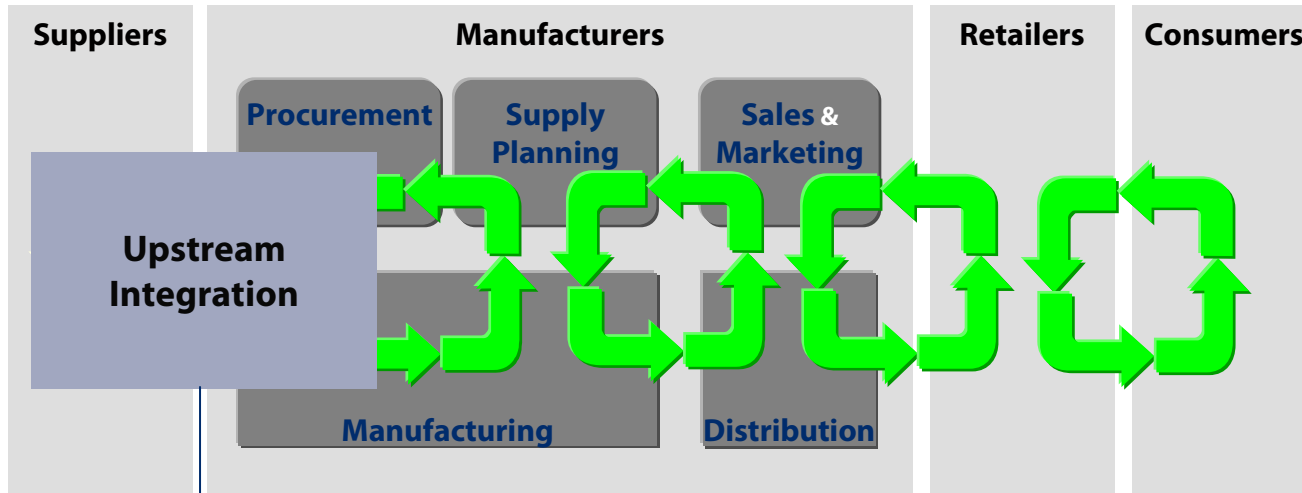


- Better visibility
- Optimised inventory levels
- Better supplier service level
- Lower integration costs
- Optimised processes
- Increased customer responsiveness
- Maximised production capacity
- Optimised inventory levels
- Reduced obsolescence
- Optimised processes
- Increased on-shelf availability
- Reduced time to market

* **Source:** GCI-GS1 Upstream webinar: Feb 06 Nigel Bagley, Unilever



Progress so far...



Many manufacturers have developed their own approach for supplier collaboration (e.g. e-mail, extranet access, EDI, etc)

- Different business process scenarios
- Different data interchanges
- Different integration technologies
- Lacking standards
- Non-scalable



Impact of Downstream on Upstream

- So far it is the “downstream” or “front end” of supply chains, driven by retailers, that has been the focus of integrated supply chain initiatives – many business benefits have accrued to retailers and their suppliers
- What does the progress made downstream mean for businesses upstream – this has largely been overlooked...

Downstream progress

- New product intros
- Promotions
- Innovations
- Responsiveness

Upstream challenges

- Shorter Time-To-Market
- Increased changes
- Reduced life cycle
- Fast response times
- Low inventories



Business Rationale for UIM

- Create a common definition of upstream business processes
- Create common GS1 identification standards for these processes
- Strengthen relationships through closer business integration
- Foundation for business programmes & integration across whole trading community – scalability
- Basis for internal process review – allowing internal as-is to remain and link to external “common language”
- Solution providers to have a bigger market due to standard approach

* from *The Upstream Integration Model V2* – a foundation for global upstream supply chain improvements



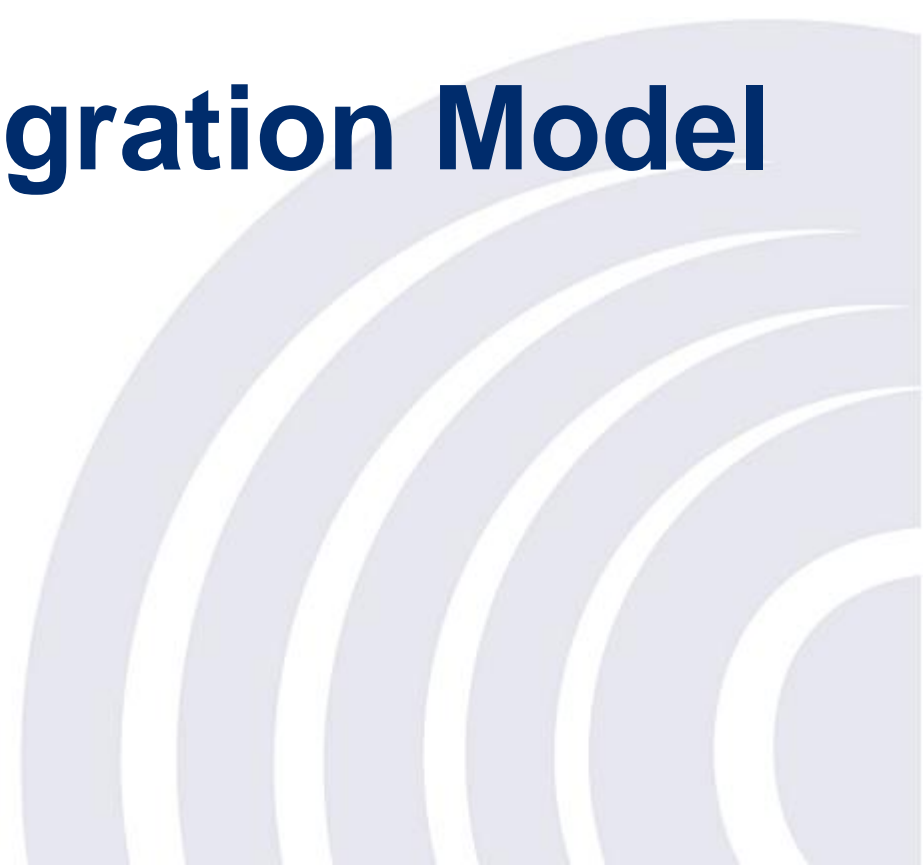
Upstream Supply Chain Management

Key features

- Casts manufacturers in the role of customer, driving the initiative upstream
- Allows manufacturers to leverage the standards and other infrastructure already in place for customers – close the loop
- Introduces GS1 standards at the source of supply chains, for use by all trading partners to the end consumer
- Is about identifying savings and improvements for both manufacturers & suppliers
- A proven framework has been developed, its now a matter of adoption and rollout



Upstream Integration Model





Upstream Integration Model Background

- Published by the Global Upstream Supply Initiative (GUSI) – an informal group of global suppliers & manufacturers within GCI
- Aims to define common business processes and data interchanges to support upstream interoperability between manufacturers and suppliers.
- Enables Trading Partners to use these common definitions, whilst still allowing them to use their own internal definitions and processes
- Designed to meet the major electronic communication needs in the following business areas:
 - Procurement
 - Material forecasting
 - Inventory management
 - Despatch, Receipt & Consumption of Materials
 - Financial Settlement

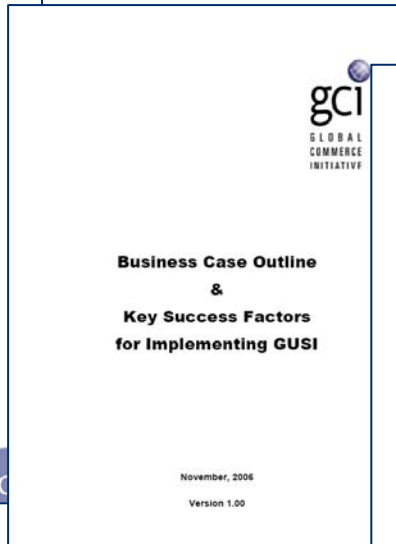
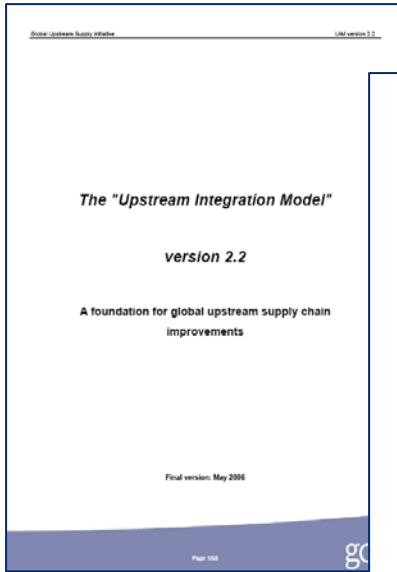


Upstream Integration Model Global Supporters





Upstream Integration Model Tools



GS1 XML Message Implementation Guides:

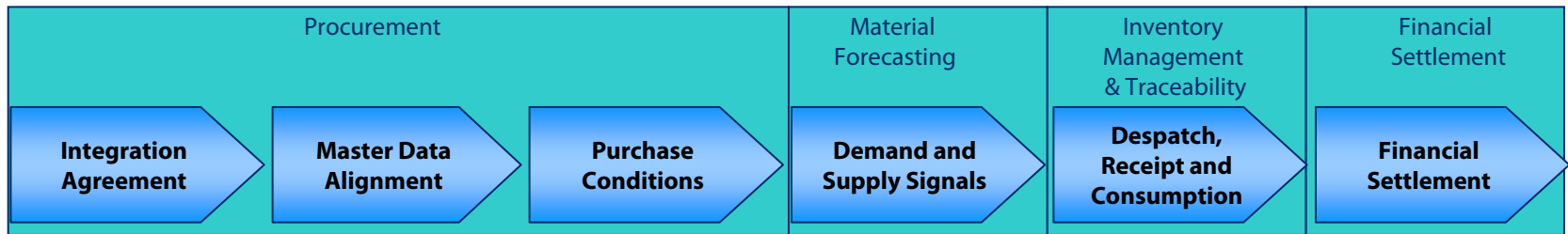
- Buyer Inventory
- Consumption Forecast
- Delivery Plan
- Despatch Notification
- Net requirements
- Net requirements Notification
- Purchase Order
- Purchase Order Confirmation
- Replenishment Forecast
- Seller Inventory

go to: [<link to GS1 GUSI Australia website>](#)



Upstream Integration Model Scope

- The Upstream Integration Model is based on the following building blocks:

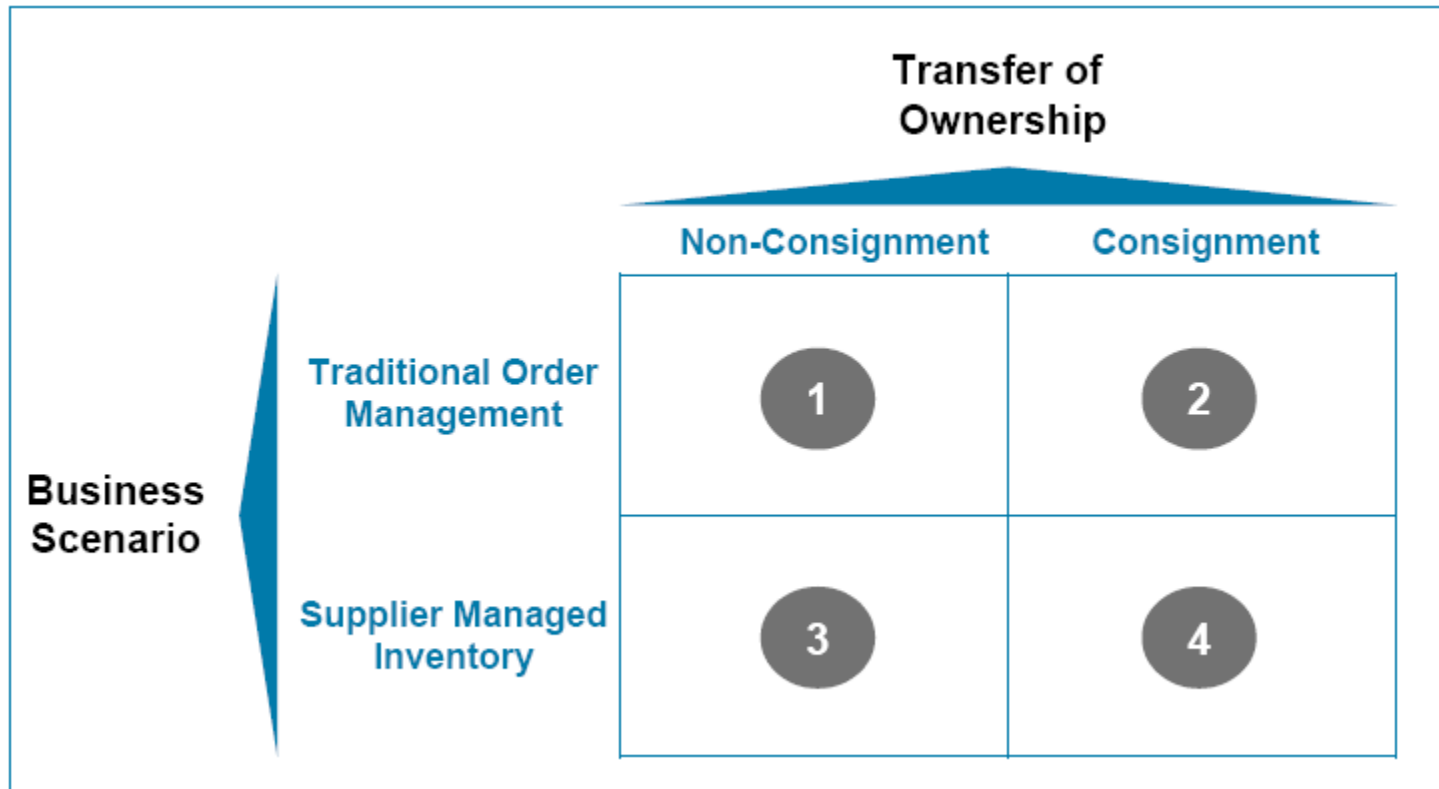


- Specifically covers direct raw and packaging materials used by the manufacturer in production (indirect materials are out of scope).
- The model has been designed to support a collaborative approach for:
 - Supplier initiated ordering (SMI); or
 - Manufacturer initiated ordering (TOM)



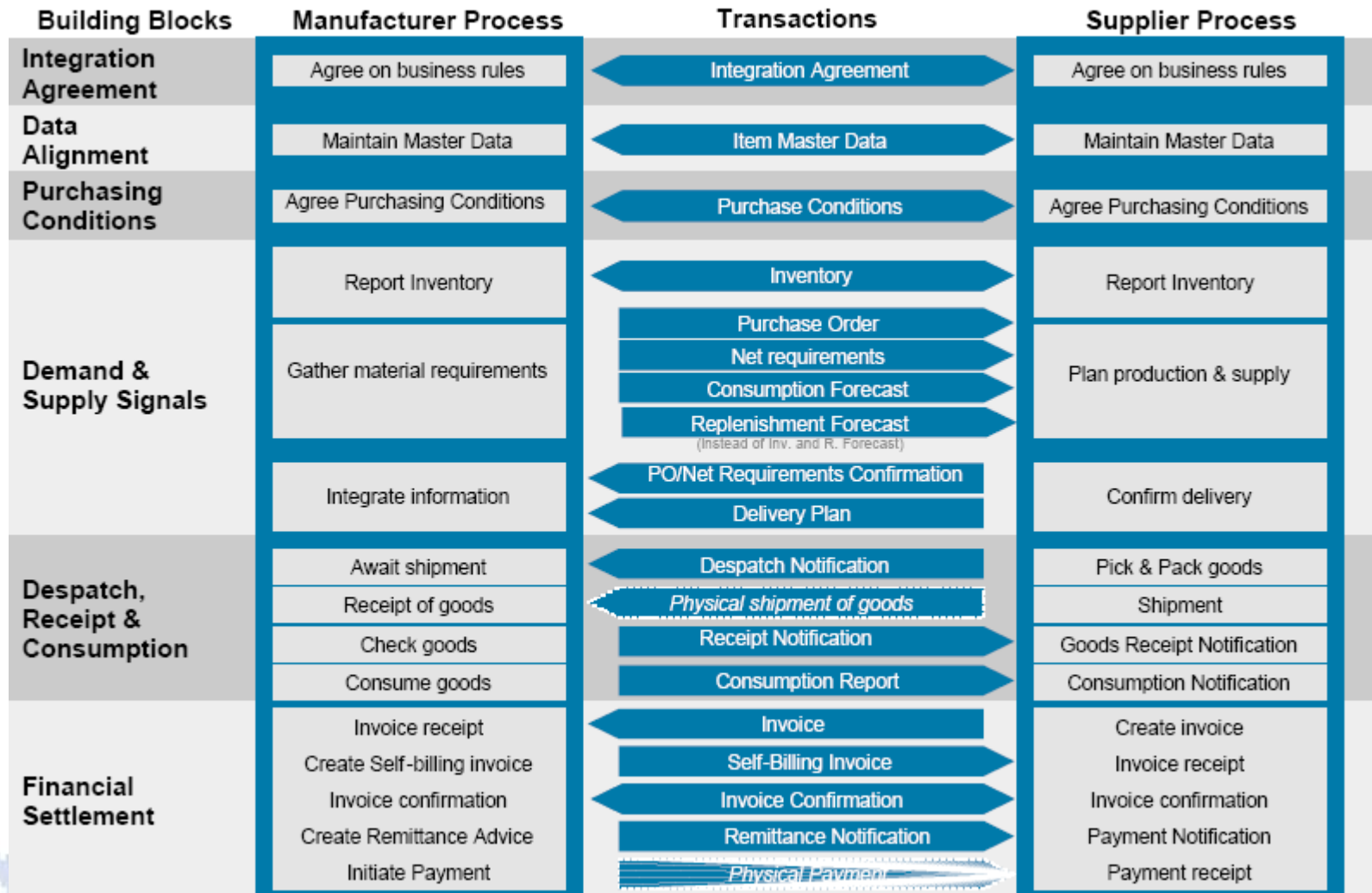
Upstream Integration Model Scope

- The following business scenarios have been identified as relevant in the context of supply chain interaction between manufacturers and suppliers





Upstream Integration Model Overview

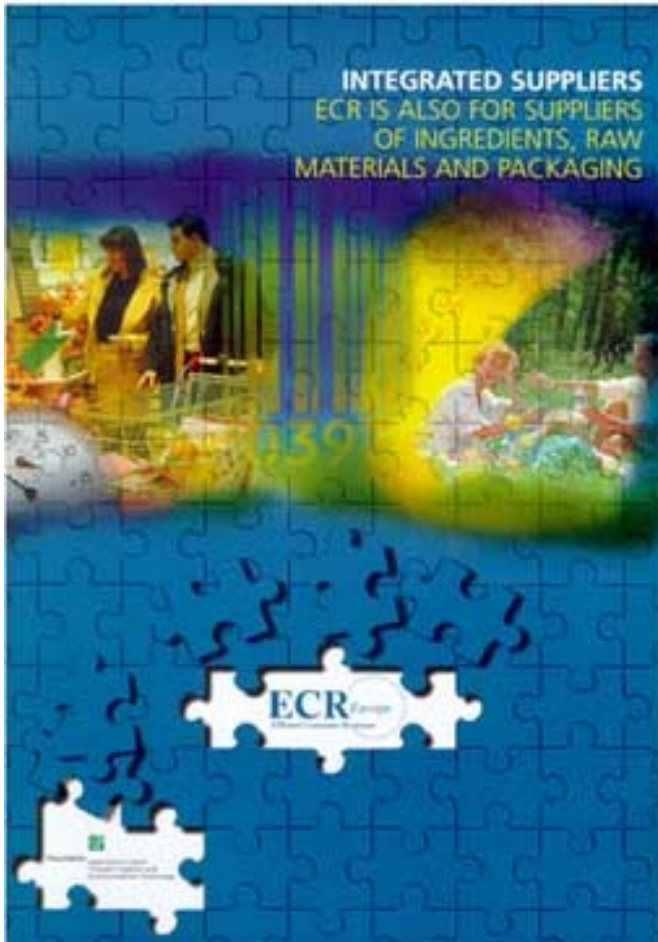


Proven Benefits for Upstream Integration Model





Upstream Integration Benefits



- 4 case studies across 13 sites demonstrated the following benefits of Upstream Integration:
- Reduction of inventory levels of up to 40%
- Reduction of administrative costs by
 - 20% (manufacturer)
 - 5% (supplier)
- Reduction in lead times by up to 40%
- Reduction of production costs by up to 6%
- Service levels approaching 100%



Upstream Integration Benefits - Patties

Australia's largest pie maker based in country Victoria
Supplying to all major supermarket chains
Complying with GS1 System requirements based on customer requirements

Patties Business Issues (as at 2003)

- No real time, accurate visibility of inventory
- Untimely manual data entry into systems
- Difficulties in planning production
- Out of stocks of raw materials
- Inflated inventory of “wrong” finished goods





Upstream Integration Benefits - Patties



- Engaged GS1 to undertake Supply Chain Review
- Scope GS1 Standards utilisation across its entire operation
- Manual processes in receiving raw materials lead to delays of up to 3 days between actual receipt and recorded raw materials inventory which resulted in:
 - Difficulties with production scheduling and distribution planning
 - False out of stocks and unnecessary reordering
 - High inventories of the “wrong” raw materials
 - Manufacturing based on materials held rather than demand forecasts
 - ...thus “wrong” finished goods inventory leading to poor order fulfillment
- Raw materials suppliers became the first (and most important) link in Pattie’s new data capture and communications processes



Upstream Integration Benefits - Patties

GS1 implementation project was a phased approach:

Phase 1 - Finished goods

Phase 2 - Receiving packaging

Phase 3 - Packaging to production & returns

Phase 4 - Distribution receive & despatch

Phase 5 - Ingredients to production & returns

Phase 6 - Receiving ingredients





Upstream Integration Benefits - Patties

Results:

- Packaging raw materials from 64 to 45 days on hand
- Ingredients raw materials from 30 to 22 days on hand
- Finished goods safety stock reduced from 10% to 5%
- Service levels for order fulfilment increased from 90% to 95%
- Raw materials waste reduction of 5%



Bottom Line:

- Shaved 20% off manufacturing materials stock (approx \$2million)
- Patties' #1 advantage is enhanced production planning
- Improved finished goods inventory visibility made sales forecasts reliable
- Reliable forecasts has benefited customers with more consistent DIFOT
- Embraced RFID technology as next steps...



Upstream Integration Model Benefits

Benefits of a standard approach for Upstream Integration:

- **Faster integration:** up to 75% reduction in the time taken to connect to new partners
- **Reduced IT costs**
 - Set-up: reduced development and training costs (both IT and business staff)
 - Maintenance: due to phasing out of multiple non-standard interfaces
- **Larger scope:** better ROI values allowing integration of previously discarded connections due to financial reasons



Great Opportunity for savings

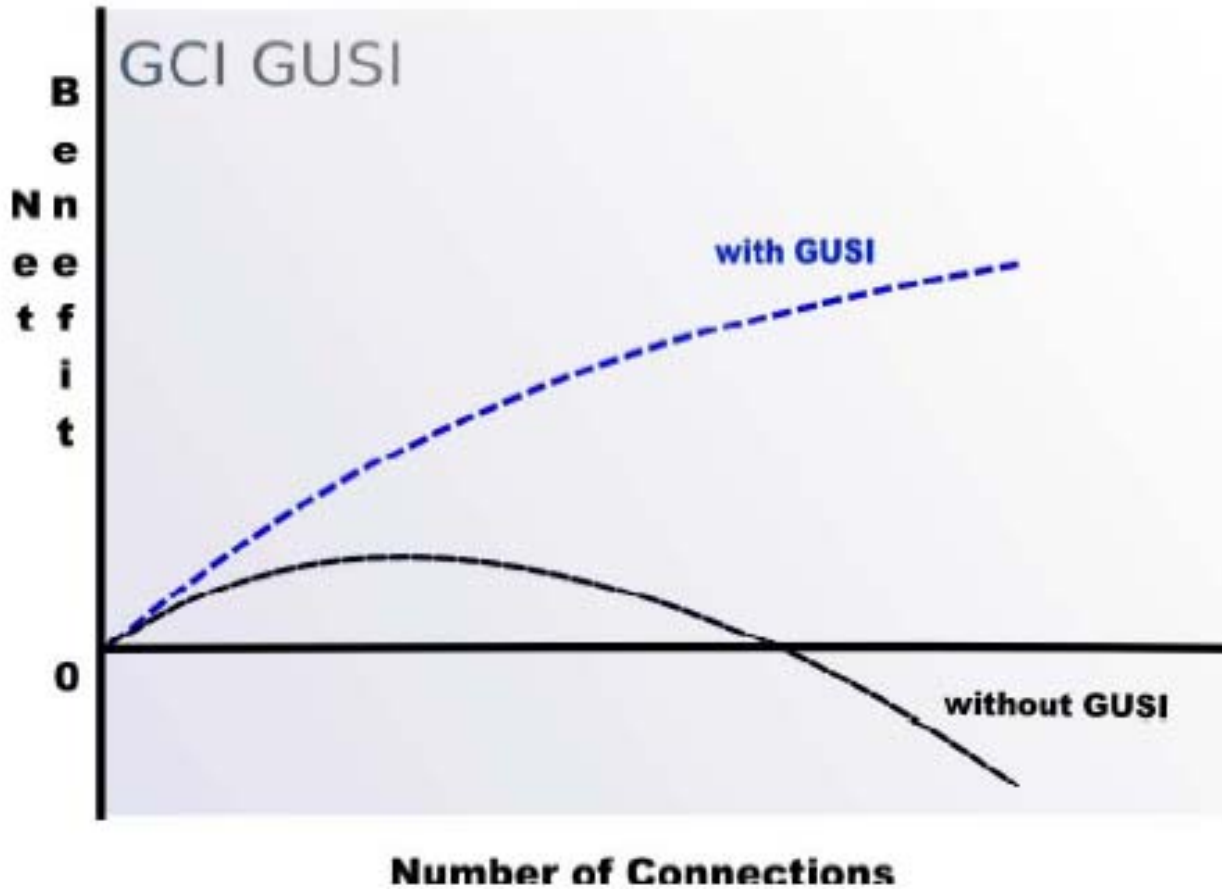


Figure 4: Illustration of the net benefit (profit)



Further Information

An Australian Industry Initiative

The Australian Food and Grocery Council, together with GS1 Australia and key FMCG manufacturers & suppliers have completed a project that will lead to the implementation of GUSI standards in the Australian FMCG sector.

For information about:

GUSI Australia participants:

http://www.gs1au.org/industry/upstream/participants_and_imp.asp

GUSI Australia Implementation toolkit:

<http://www.gs1au.org/industry/upstream/uit.asp>

further assistance: http://www.gs1au.org/contact_us/index.asp

please use these links





Contact Details

GS1 Australia

W www.gs1au.org

