



From Scalpels to Sustainability:

How standards are creating solutions for seemingly intractable challenges

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A look at different kinds of structures



For-profit firms vs Not-for profit

For-Profit Firms

Profit Maximization *

Competition

Competitive Advantage

**Knowledge Acquisition
& Protection**

Innovation

Not-For-Profit Organisations

Fulfill mission *

Collaboration

Break-Even

Knowledge Sharing

Innovation



Closed/Proprietary vs Open

Closed/Proprietary systems

Lock-in users

Protects incumbent with apparent high cost of switching

Little to no variety

No incentive to promote innovation

Goal: Extract a rent

Open systems

Enable technology & knowledge transfer

Create social interaction across boundaries

A democratic arena where competitors can meet

Efficient use of resources

Goal: Maximize efficiency



Tacit vs Codified Knowledge

Tacit knowledge

Difficult to articulate

Shared through interpersonal communication

Sensitive to context

Subconsciously understood through experience & observation

Codified knowledge

Easily transformed into written documentation

Can be communicated across distance

Can be shared with numerous individuals

Can be understood and interpreted by its target audience



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How do we get the best and avoid the worst of these?



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We believe it requires a mix of standards and market forces.



Standards and Market Forces



What are standards?

- Standards are **agreements** that structure any activity or any industry.
- They may be **rules** or **guidelines** that everyone applies.
- They may be a way of **measuring**, or **describing**, or **classifying** products or services.



Characteristics of good standards

Open

Neutral

Simple

**Independent of
Technology**



To get standards, you need standards bodies

Standards bodies are usually:

- Neutral and independent forums for non-competitive knowledge transfer between stakeholders
- Repository of specific knowledge (both codified and tacit)
- Independent stewards of processes that produce desirable outcomes
- Transmitters of best practices in implementation

A few of the many standards bodies in the world today:

3GPP—3rd Generation Partnership Project
ANSI—American National Standards Institute
IEEE—Institute of Electrical & Electronics Engineers
IETF—Internet Engineering Task Force
ISO—International Organization for Standardization
ITU—The International Telecommunication Union
SNZ—Standards New Zealand
TM Forum—Telemanagement Forum
UPU—Universal Postal Union
WMO—World Meteorological Organization
W3C—World Wide Web Consortium



Standards and Market Forces



What are market forces?

When a market works well, it “selects” the best solution for both buyers and sellers.



Standards & Market Forces



The presence or absence of this mix of standards and market forces can mean the difference between success and failure in supply chains and other business processes.



**Standards-setting capabilities +
The ability to harness market forces =
A knowledge broker**



What is knowledge?

**Knowledge
is much
more than
just facts**

**It is...
experience
application
participation
understanding
background
history**



**With its standards-setting capabilities and
the ability to harness market forces,
GS1 is a knowledge broker**



GS1 is a standards-setting organisation

GS1
designs and
implements a
global system
of supply
chain
standards

GS1 standards provide a **framework** that allows **products, services, and information** about them to move efficiently and securely for the benefit of businesses and the **improvement of people's lives**, everyday, everywhere



GS1 can help harness market forces

**GS1 brings
together
companies
representing
all parts of the
supply chain**

Manufacturers, distributors, retailers, hospitals, transporters, customs organisations, software developers, local and international regulatory authorities, and more **work together under our leadership** to create standards



Why are knowledge brokers important?

Standards alone aren't enough



Market forces alone aren't enough





Why are knowledge brokers more important now than ever?



Because it's ***time-consuming*** when a barcode doesn't scan properly at the check-out of your supermarket...



And it was ***annoying*** when your cellphone didn't work when you got off the airplane in Asia...



But a problem in a hospital is potentially ***serious and life-threatening.***



A problem in a chemical plant could have a ***real impact*** on the entire planet.



A problem at a port could be ***dangerous*** in ways we cannot even imagine.



A problem with the fresh food
you feed your family could
result in ***illness or worse***



**It's a new world.
Knowledge brokering is more important
than ever.**

Patient safety, border safety, food safety...
From scalpels to sustainability,
you need this interplay between
standards and market forces.

**...but there is an additional
dimension.**



**Some of our first
success stories and learnings
in healthcare**



GS1 Healthcare: Devoted to Standards and Enhancing Market Forces

Our Mission

To lead the healthcare sector to the successful development and implementation of **global standards** by bringing together experts in healthcare to enhance **patient safety** and **supply chain efficiencies**.

Our Vision

To become the **recognised, open and neutral source** for regulatory agencies, trade organisations and other similar stakeholders **seeking input and direction for global standards** in healthcare for patient safety, supply chain security & efficiency, traceability and accurate data synchronisation.



Global Healthcare User Group

GS1 Healthcare is a voluntary, global user community bringing together all Healthcare stakeholders

Manufacturers ♦ Wholesalers ♦ Distributors Hospitals ♦ Pharmacies ♦ Regulatory Bodies ♦ Trade Associations ♦ GS1 Member Organisations

2008 Leadership Team



Mike Wallace



Grant Hodgkins



Volker Zeinar



Frédérique Fremont



Co-Chair: Mark Hoyle



Ramesh Murthy



James Hickland



Tom Werthwine



Ron Bone



Jackie Elkin



Scott Cameron



Co-Chair: Tim Marsh



Joe Pleasant



Jim Willmott



in Europe



US



Japan



Membership around the world

Members global user group

Manufacturers

Abbott Laboratories
Alcon Labs
Amgen
Astra Zeneca
Baxter
B. Braun
Boston Scientific
Bristol Myers Squibb
Cook
Covidien
Edwards Lifescience
Fresenius
Glaxo Smith Kline
Johnson & Johnson
King Pharmaceutical
Medtronic
Merck & Co.
Novartis Pharma
Pall Medical
Pfizer
Schering Plough
Smiths Medical
Sakura Seiki

Distributors/Healthcare providers/GPOs/T&L

Cardinal Health (U.S.)
CH Aulnay sous Bois (France)
Comparatio Health (Germany)
CVS (U.S.)
DHL Exel Supply Chain
Erasmus MC Rotterdam (NL)
UNI.HA (representing 17 French university hospitals)
Hong Kong Hospital Authorities
McKesson (U.S.)
Novation (U.S.)
Orthopädisches Spital Speising Wien (Austria)
Premier (U.S.)
Marienhospital Herne (Germany)
UMC Groningen (NL)
University Kentucky Healthcare (U.S.)
Wiener Krankenanstaltenverbund (Austria)

Non-voting members

AHRMM
Cladimed
Instituto Brasileiro de Ética
Concorrencial – ETCO
Public Health Agency of Canada
US DoD
US FDA

Local participation

Manufacturers

3M
Bayer
Becton Dickinson
Boehringer Ingelheim
Coloplast
Draeger Medical
Genzyme
Hospira
Kimberly-Clark
Novo Nordisk
Purdue Pharma
St. Jude Medical
Stryker
Teva Pharmaceuticals
Terumo
UCB
Upsher-Smith
...

Distributors/Wholesalers

Aexxdis
Amerinet
Amerisource Bergen
CH2
Depolabo
Galaxis
GAMMA Wholesale
Geodis
McMahon
Owens & Minor
...

Healthcare providers/Retailers

Alfred Hospital (Australia)
Ascension Health (U.S.)
Capital District Health (Canada)
CHU de Québec (Canada)
CHU Dijon (France)
HUG Geneva (Switzerland)
London Drugs (U.K.)
Mayo Clinic (U.S.)
Sisters of Mercy (U.S.)
Sobeys Pharmacy (U.K.)
UHCS Augusta VA (U.S.)
Walgreens (U.S.)
Wal-Mart (U.S.)
...

Associations

AHA (U.S.)
CIP/ACL (France)
ChES (U.S.)
EFPIA (Europe)
Eucomed (Europe)
FENIN (Spain)
GIRP (Europe)
HDMA (U.S.)
International Hospital Federation
JFMDA (Japan)
Medical Industry Association of Australia
NACDS (U.S.)
Patient Safety Foundation (U.S.)



Local Healthcare Experts



France



Canada



Austria



Russia



Spain



US



Australia



UK



Switzerland



Germany



Malta



Slovakia



New Zealand



Serbia & Montenegro



Macedonia

And more in preparation...(Belgium, Japan, Netherlands, Sweden, Tunisia..)



Working with international organisations



- GS1 Healthcare is member of the World Health Organisation IMPACT Work Team « Technology »



- GS1 Healthcare is working with the Global Harmonisation Task Force about Unique Device Identification



- GS1 Healthcare is working with the European Commission on the issue of patient safety
- BRIDGE Project



- The Council of Europe is recommending global harmonisation in Healthcare with GS1 Standards



Working with national organisations

Australia: NeHTA National Product Catalogue / Monash eCOM

Canada: Canadian Public Health Agency / CareNET

France: eProcurement Platform

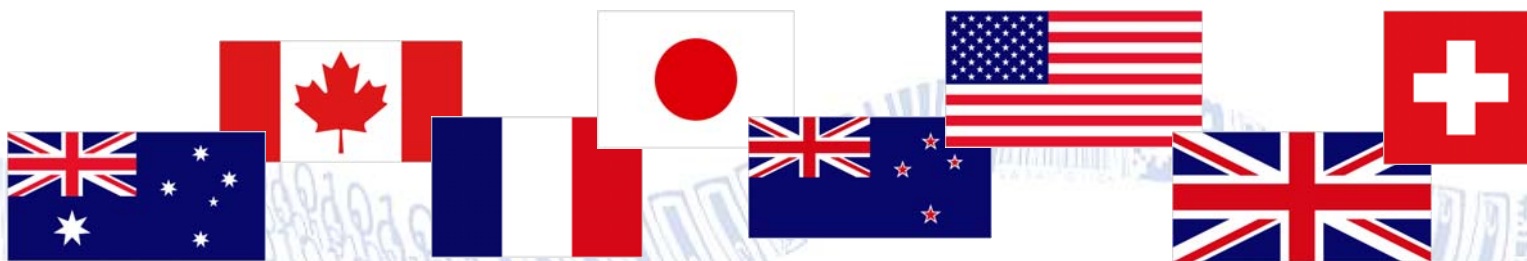
Japan: Ministry of Health & JFDMA Bar code guideline

New Zealand: Medication Safety Project Ministry of Health

USA: FDA / HSCSC / Department of Defence

UK: Coding for Success » Department of Health

Switzerland: SmartLog Project





Working with national organisations



Medication Safety Project in New Zealand

- GS1 New Zealand working with the Ministry of Health
- NZ\$ 101 million project to upgrade all District Health Board hospitals in New Zealand
- Will enable bedside verification based on GS1 Standards
- Cost utility analysis: potential savings over the first 12 years:
 - saving 1,050 lives
 - preventing about 2,800 people being subject to permanent disabilities
 - preventing about 29,000 shorter term disabilities



GS1 Healthcare: Knowledge broker

Standards

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Market forces

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Knowledge brokering is more
important than ever.**

Patient safety, border safety, food
safety...

From scalpels to sustainability:

you need a **hybrid mix of
Standards, Market forces and
engaged Regulators**

GS1 can help.



GS1

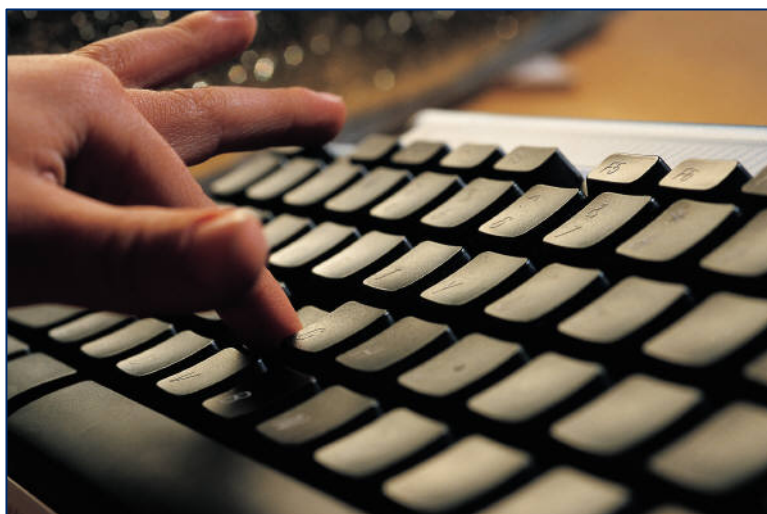


Buyers and sellers, producers and users, all the actors of the supply chain need standards, market forces and regulators to succeed.

That's why there is an organisation like GS1.



For more information



www.gs1.org
www.gs1nz.org



Contact details

GS1 Global Office
Brussels, Belgium
www.gs1.org

The global language of business

www.gs1.org