

Supply Chain Timeline 1810 - 2018

1810

Logistics is launched in English In January 1810 'The Scots Magazine and Edinburgh Literary Miscellany for January 1810' publication included an article explaining Dr Wilhelm Müller (The first public instructor on Military Science at The University of Gottingen) was going to release a book 'The Elements of War' in the book which was later renamed 'The Elements of the Science of War' Muller described the Logistics of soldiers movements. This is the first time the word was used in the English language.





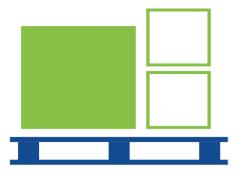
Nearly 100 years after the word Logistics was first coined in the UK, 'The Independent' newspaper ran an article describing 'Supply Chain', again this was in relation to wartime activities.

1905

The term 'Supply Chain' is used for the first time

1913 The birth of the *'Assembly Line'* Ford, now a well-known car manufacturer, installed their first moving assembly line capable of producing an entire automobile to enable them to produce their vehicles whilst ensuring economy of sale for their business. This process was the creation of the 'Assembly Line'.





During the 1940's in to the 50's the focus in the logistics field was on finding ways to obtain better warehouse space, the use of racking and ultimately ways to achieve the best possible layout for a warehouse. Use of pallets became increasingly popular during this time alongside the 'unit load' concept.

1940's Pallets and Pallet Lift Mechanisation

1950 Transport Management Following the increased popularity of pallets and the unit load concept during the 40's, 1950 saw the birth of 'Transport Management' through the utilisation of intermodal containers alongside trucks, trains and ships to transport items to wherever they needed to be. It is widely believed transport management paved the way for Supply Chain globalisation.



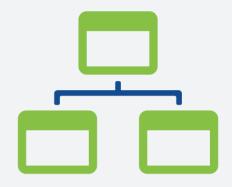


In 1952 a patent was issued to Norman J Woodland and Bernard Silver.

US Patent 2612994 was for a Barcoding system. The warehousing world was about to be revolutionised.

1960 Electronic Data Exchange

In 1960 the discovery was made that computer systems had the capability to transfer data from one computer to another enabling the exchange of electronic business documents. Whilst this is something we now do so often it is the 'norm' in 1960 this was a massive advancement for businesses around the world.





IBM employee Gene Thomas developed a document called 'Bill of Materials'. This is the first known version of a Material Requirement Plan (MRP). 1961

Material Requirement Plan

1963 The Council of Logistics Management In 1963 'The Council of Logistics Management' was founded. Their name at the time of conception was 'National Council of Physical Distribution Management'. They changed their name in 1985. The council quickly became the leader in their field and much research was carried out in their areas of interest.





Recycling is an area of focus for most businesses these days, going green, looking at ways to cut down on waste and find environmentally friendly ways to dispose of waste is big business. In 1971 was a relatively new concept for businesses following the release of a book titled 'The Environmental Handbook Prepared For The First National Environmental Teach-In' was released by Garrett De Bell, in 1970.

1970 Recycling

1971 Reverse Logistics In 1971 Zikmund and Stanton named 'reverse logistics' as 'reverse distribution' and defined it as; 'Conceptually, reverse distribution is identical to the traditional channel of distribution. The consumer has a product to sell and, in essence, he assumes the same position as a manufacturer selling a new product. The consumer's (sellers) role is to distribute his waste materials to the market that demands his product.

In modern times Reverse logistics are applied in many different ways, most commonly is the collection of products that are being returned.





In 1982 The Financial Times ran a piece on Keith Oliver where he defined the Supply chain concept as "Supply chain management (SCM) is the process of planning, implementing, and controlling the operations of the supply chain with the purpose to satisfy customer requirements as efficiently as possible. Supply chain management spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point-of-origin to point-of-consumption".

1982

Following this article the term Supply Chain Management was quickly adopted as the norm, whilst today there are variances on the definition of Supply chain Management it is fair to say they do not differ greatly from this original explanation.

Introduction of the term 'Supply Chain Management'

1985 Fed Ex Re-invents Express Parcel Shipments In 1985 Fed Ex developed a new computerised tracking system that provided near real time information about packages for delivery. Equipping drivers with portable hand held computers to scan pickups and deliveries, meaning the status of a shipment could be monitored end to end.





In 1990 the principles of Lean manufacturing were not new, the term 'Lean Manufacturing' certainly was. When Womack, Jones, and Roos wrote THE MACHINE THAT CHANGED THE WORLD in 1990, Japanese automakers were making a strong showing by applying the principles of lean production. However, the full power of lean principles were unproven. Today, the power of lean production has been conclusively proved by Toyota's unparalleled success, and the concepts have been widely applied in many industries.

1990 Lean Manufacturing

1998 Amazon Order and Delivery In 1998 Jeff Bezos left his job on Wall Street to start Amazon. Within four months, the company became extremely popular. Within a month of its website launch Amazon had filled orders from 50 states and 45 countries. Amazon only carried 2,000 titles in its Seattle warehouse; however, usually no warehouse was needed because most orders were placed through wholesalers and publishers. H



In 2000 RFID was developed at the MIT Auto-ID Center. It is a code-carrying technology, and can be used in place of a barcode to enable non-line of sight-reading. It's synonymous with track-and-trace solutions and has a critical role to play in supply chains.

2000 Track and Trace

2001 Disaster for CISCO Cisco is the worldwide leader in IT and networking however in May 2001 they were forced to write off \$2.2 billion worth of inventory. This is the biggest write-off in history. It's fair to say many businesses would struggle to continue trading following a disaster of this scale.





In 2003 a book was published titled "The future of knowledge: increasing prosperity through value networks". Amsterdam; Boston: Butterworth-Heinemann. The author of the book Verna Allee provides a collection of frameworks and ideas to help organisational leaders

2003 The creation

navigate through the challenges in a knowledge-based society. Her value network approach identifies key and exploitable relationships within complex, dynamic, organisational systems. These ideas are compatible with creating strategic dialogues within learning organisations.

of the 'Value Network'

2009 Creation of the Blockchain

Satoshi Nakamoto is the name used by the unknown person or people who developed bitcoin. They authored the bitcoin white paper published in 2009, and created and deployed bitcoin's original reference implementation. As part of the implementation, they also devised the first blockchain database. As little is known about the creators of bitcoin and blockchain it is hard to understand where the concept of blockchain come from and how they developed it however Blockchain's are now becoming more widely used and discussed and are likely to develop in capabilities over the coming years.





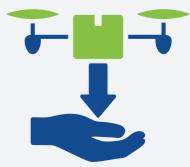
IoSCM is the first international institute to represent the interests of the wider supply chain. Our aim is to improve the industry by setting standards and promoting best practice through high-quality training and qualifications. Dedicated to supporting and developing individuals, businesses and the profession as a whole, IoSCM offer a range of services and products with the main aim of creating a better future for the supply chain and those who work within it.

2012

The creation of The Institute of Supply Chain Management

2013 Introduction of drones in business

While drones have been around for over a century it was 2013 before they made their debut in the business world, prior to this date drones had been a long serving weapon for the Military. When Jeff Bezos, CEO for Amazon, announced they were trailing the use of drones as a method of delivery he sparked an international interest in the potential uses. Since 2013 much time has been spent on upgrading and improving the drone to carry out many tasks for businesses, it is now relatively common to find drones in warehouses carrying out tedious tasks such as taking inventory. It is estimated the drone market is now worth around \$10 billion.





With developments in technology growing at a faster pace than ever who knows what the next big development in Supply Chain & Supply Chain Management may be however I cannot wait to see what it is. I would love to hear from any of our readers with their prediction on the next big thing!

NOW and the Future

Created by Kimberley Jayne on behalf of IoSCM

Sources;

http://supplychaindharma.com/history-of-supply-chain-innovation/ http://www.supplychainrecruit.com/content/supply-chain-explained-26.htm http://www.strategosinc.com/just_in_time.htm https://www.amazon.co.uk/Machine-That-Changed-World/dp/1847370551 http://supplychaindharma.com/history-of-supply-chain-innovation/ https://www.economist.com