

New technology in the Supply Chain

Much has been written about new technologies in the supply chain and often from a “vested interest” viewpoint. Writers are usually either suppliers of equipment or users trying to justify their choice of purchase. In this article we try to dispel some of the myths and offer an independent opinion.

First of all when we talk about new technologies we are often talking about electronic hardware as this is the area where most new developments have taken place (sure there is new technology in vehicle engines say but these rarely excite the logistician in the street). In fact we can go further and say that most of the new technologies are really data collection or input devices. We’re typically thinking of track and trace devices, in cab monitoring devices for commercial vehicles, GPS based devices and the like.

Unfortunately technology has a habit of keeping one step ahead of man’s ability to use it and problems have been encountered. Further investigation, however, suggests that the fault often lies, not with the technology itself which is generally very reliable, but with the systems these devices interface to. As has already been said, we are usually talking about data collection and input devices which implies that to be of use, having been input or collected, the data needs to go somewhere to be process and analysed.

In the early days of barcoding many companies approached hardware suppliers asking for a “barcode system”. The more honest suppliers pointed out that there was no such thing, only systems into which data can be input using barcodes. We have the same situation today. Companies are interested in new technology or have had bad experiences of new technology but do not consider what systems and software they need to make use of it. The problem is compounded by the fact that the price of new technology is often not great but the cost of the systems that they interface to, particularly after adding in all of the implementation and other costs, can be orders of magnitude greater.

This leads us to the prime obstacle in the adoption of new technology. Justifying the real cost. In some cases there may not be a choice. Anyone involved in home delivery on a reasonable scale must have track and trace technology in place – customers demand it. In other cases though there have to be sufficient savings available to justify the cost and these are not always there – particularly if an incremental cost justification approach is taken. It is not uncommon to introduce a new system and use this as an opportunity to change some processes only to discover that it is the process changes that deliver much of the benefit. In the case of vehicle monitoring equipment many users have seen significant

New technology in the Supply Chain

improvements in fuel consumption for example whilst others have achieved the same improvements through better driver training.

So the key to the successful use of new (electronic) technology in the supply chain is to ensure that the systems behind it are gaining maximum value from the data collected and that an incremental cost benefit is taken to prove that the benefits are really attributable to the technology itself.