



David Warrilow

In today's global supply-chain, the weakest link is still the logistics operations, because of a lack of process maturity, argues David Warrilow

# Process maturity

A high level of process maturity in global logistics is a must if the sector is to improve its performance. 3PLs can help to get us there, but they too need to change. David Warrilow, Managing Director, Audax, explains the concept.

What is process maturity, and why is a lack of it damaging to the global logistics sector? Business process maturity is the application of the state or quality of being fully grown, or developed, to a process within a business. In global logistics, it can be applied to the processes involved in moving freight from manufacture in China through the export and import gateways to the final customer.

According to Six Sigma, process maturity gives an indication of how close a developing process is to being complete and capable of continuous improvement through quantitative measure.

The concept of process maturity has been proposed for various management approaches as a way to evaluate 'the state of being complete, perfect, or ready' and the 'fullness or perfection of growth or development'<sup>1,2</sup> used two dimensions – effectiveness and efficiency – to rate the condition or maturity of a process.

For reasons that this paper addresses, the business processes found in global logistics tend to be very immature. They are hardly off the starting block, yet the sector behaves as if the situation is normal and OK: a result of muddling through and not knowing any better:

The financial cost of immaturity is immense. Being low in process maturity will not yield the same return as a high process maturity level. The fallout from immaturity includes higher costs and inefficiencies resulting from overstaffing, warehouse overcapacity, volatile service levels and underperformance and an unhealthy high churn rate between customer – for example, a manufacturer of high-tech goods – and 3PL. The churn rate is a result of the 3PL not meeting the expectations of the customer, despite claiming at quarterly reviews that its performance is very good. The facts speak otherwise, as might be expected where process immaturity is common.

## Models of maturity

Business process maturity can be divided into levels, that together make one or more models. A three-level model may look like this:

- Level one – quality control
- Level two – quality assurance, which includes measures to ensure that quality remains of a certain quality
- Level three – improvements

Level three addresses the causes of lack of quality in a process. In this model, many global logistics processes have yet to get anywhere near stage two.

A five-level model ranges from the very basic level – doing things in an ad hoc way, level one – to the sophisticated – continuous process improvement, optimised by quantitative feedback, level five. Level three is where most processes have been defined but are not optimised, through lack of systematic application of statistical management techniques. In this model, many global logistics processes are stuck at level three or just below. Here, an organisation may have investigated why it is making mistakes and why inefficiencies are created, but has been unable or unwilling to move to the next level.

Achieving level five results, a flawless operation, is a rarity indeed in global logistics. However, with the bulk of the global logistics sector not having a formal quality and measurement-based process in place, maturity is consequently very low. A walk around an import gateway will amply demonstrate my reasoning. There is a lack of awareness about the need for quality in the processes taking place and how efficiencies could be improved.<sup>3</sup>

### Why such a lack of awareness?

Global logistics is a long way behind the sophisticated and highly responsive local logistics operations found in supermarket chains in the UK. It might be 50 years behind manufacturing in terms of investment, use of new technology, business processes, quality and attitude to the customer. The Second World War forced change on manufacturing due to the need to rebuild manufacturing plant; logistics experienced nothing similar. Things could still get from A to B. They still can; but the various attitudes shaped by that fact have held back improvements.

Consequently, the sector is held back by old-fashioned processes that do not focus on quality and continuous, sustainable improvement. The sector suffers from too many assumptions and not enough facts based on measuring what is going on in the delivery pipeline. If measures were much more widespread than they are, awareness of the need for change would drive change.

Currently, a number of major customers of a 3PL are addressing the measurement and quality of service issues, due in part from pressure from their 3PL, which is keen to improve relationships with the customers (and win and retain more major accounts). However, some of the customers are driving a programme of measurement, because they acknowledge that measurement makes the 3PL more accountable for its claims about service levels.

### What now?

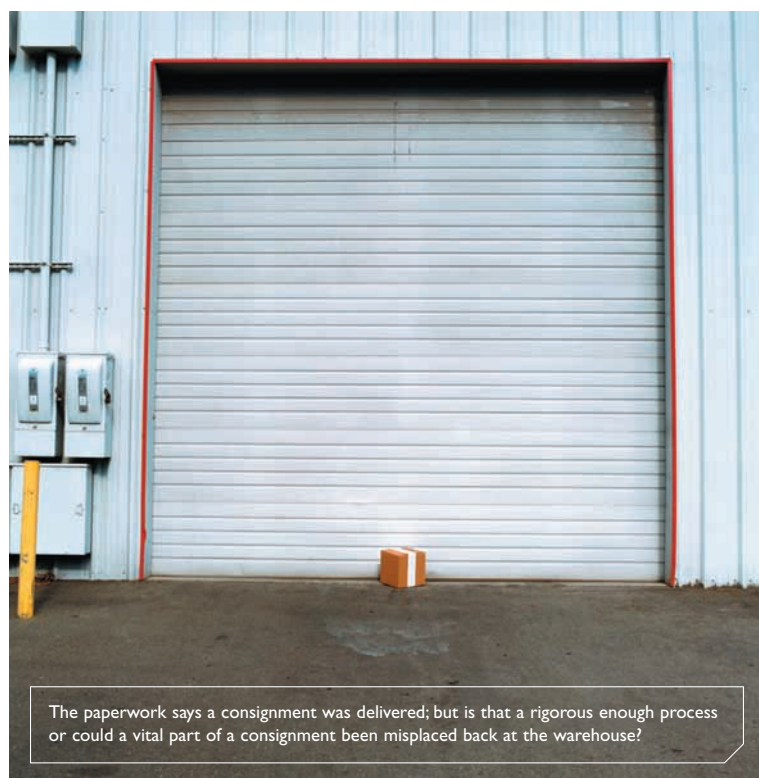
The whole delivery pipeline – starting with the export gateway – needs to be looked at to see where quality can be introduced, quality assurances given and a programme of continuous improvement implemented.

The 3PL is ideally placed to take an eagle's-eye view of the delivery chain and impose order and quality on it. If it does not, the customer – for example, the manufacturer of the goods being moved – may intervene, as is beginning to happen among some of the biggest manufacturers of computer equipment. There are opportunities now for the manufacturer to take management of quality in house and become a 4PL, but even then it will still most likely need to use a 3PL for those parts of the delivery chain where the 3PL adds value.

Currently, 3PLs in general face serious challenges over the high churn rate and how they can add value without incurring a loss, when costs are often based on shipping costs and not on the value that the 3PL adds. As has been described, the high churn rate arises from the discrepancy in performance figures given at quarterly review meetings with the client. The 3PL puts its own 'good' service level figures on the table.

The customer knows these do not reflect reality on the ground and, typically after three years with the same 3PL, will move on, dissatisfied, to another 3PL – where the chances are the same will happen again. In the 10 years that have passed since globalisation of manufacturing began to take off, some customers have been through three 3PLs and have returned to the original in the hope that it will deliver what it – and the others – did not previously. This behaviour on the part of the customer is a result of process immaturity.

The only way to close the performance gap between 3PL and customer, and to build the confidence of the customer while developing beyond the earliest level of maturity, is for the 3PL to use objective software-based measurements throughout the delivery pipeline. These »



The paperwork says a consignment was delivered; but is that a rigorous enough process or could a vital part of a consignment been misplaced back at the warehouse?

Handle with care!  
3PLs must have a strict process in place at every point in the chain. Otherwise the gap between customer expectation and actual results will widen to the point where the customer changes its 3PL – again!



measurements can end the disconnect between apparent reality in the 3PL office and the 'real' reality on the ground.

The 3PL office reality sees decisions being made by logic: if this piece of paper says freight x is at location y on a specific date and time, then it must be. On the ground the situation may be very different, with part of freight x missing and none of it at location y. If measurements were routinely used and triggered by physical events, the 3PL would know for sure where all and/or part of the freight was.

The business benefits of that alone could be huge in terms of not losing immediate business from an unhappy client. Measurement can build bridges into the long term, cut costs, reduce delivery times and deliver wide-ranging improvements in service levels. Continued

use of it can better enable a programme of continuous improvement to be implemented and therefore be an enabler for the highest level of maturity to happen.

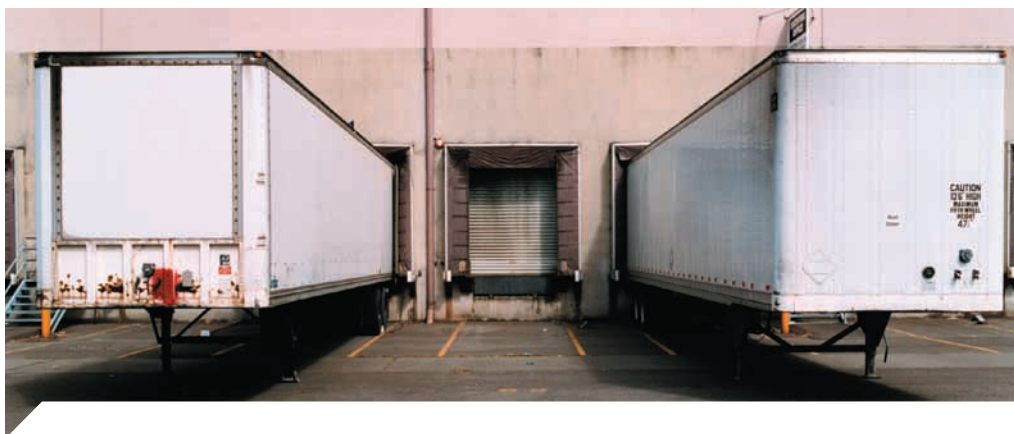
### End of old practices

In an era of explosive growth in global logistics, the onus is on all parties to see where old practices can be modernised, business relationships improved and the bottom line enhanced. The 3PL can play a pivotal role in this. The sector is booming from the viewpoint of being busy, but less so from the viewpoint of retaining customers and improving performance and profitability.

DHL is showing the way in using measurement to enhance relationships with customers, partly through improving SLAs. But with many organisations in global logistics still using outmoded ways of doing business, process maturity in the industry is a long way off. >>

Guaranteed delivery?  
The disconnect between a 3PL company's records saying delivered and the reality of a parcel left unsatisfactorily on a doorstep is the kind of issue that leads to customers changing 3PLs every three and a half years on average.





In terms of process maturity, global logistics is perhaps 50 years behind manufacturing in terms of use of technology, business processes and customer care

## In conclusion

Although the Software Engineering Institute (SEI) at Carnegie Mellon University cautions against using the following statistics to extrapolate percentages per sector involved in the adoption of the five-level maturity model, they do cast light on which sectors are the most enthusiastic about process maturity.

Based on the number of process maturity appraisals submitted to the SEI, the sector percentage breakdown is:

- Business services: 37.2%
- Manufacturing: 24.9%
- Engineering and management services: 13%
- Public administration: 13%
- Transport, communication and utility: 2%
- Other sectors: 9.9%

Assuming that global logistics falls under transport, it can be seen from this sample that the sector lags very significantly behind some of its most significant customers – manufacturers. It can therefore be understood more fully why those customers express so much unhappiness with the performance of 3PLs.

They are more advanced in process maturity. They use systems more. So consequently they measure more. 3PLs must emulate them if they want to be equal partners, to be taken seriously at the quarterly reviews and to reap the other rewards that process maturity can bring.

## References

1. OUP, *Oxford English Dictionary – The Definitive Record of the English Language*, Oxford University Press, 2004
2. DeTORO, Irving and McCABE, Thomas, 'How to Stay Flexible and Elude Fads', *Quality Progress*, 1999
3. Sources: Carnegie Mellon University [www.sei.cmu.edu/appraisal-program/profile/profile.html](http://www.sei.cmu.edu/appraisal-program/profile/profile.html); Six Sigma [www.isixsigma.com](http://www.isixsigma.com); paper by Jurgens Pieterse, speaker and Executive Director, SystemicLogic, 'Tracking process maturity', <http://blogs.ittoolbox.com/eai/practices/archives/008879.asp?rss=1>

## About the author

**David Warrilow** has worked in IT for more than 30 years and has been a director of several software and consultancy companies. The last 10 years have seen him focusing exclusively on requirements and solutions for global logistics. He has worked with some of the world's largest companies in developing their supply-chain programmes. Now resident in the UK, he has lived in the Middle East and travels extensively around the world in the course of his business. His experience in global logistics has enabled him to become a speaker and writer for the logistics and supply-chain press.

## Information

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