

# **Pharos**informatics

## **Case Study**

Mobile phone wholesaler Process re-engineering  
and Activity Based Management analysis

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# ***Case study: Mobile phone wholesaler***

## ***Process re-engineering***

### ***and***

## ***Activity Based Management analysis***

A wholesale business had done well during the heady days when everyone wanted electronic gadgets and phones. While the total number of mobile phones manufactured on the planet equalled the number wanted by consumers, not all the products were in the right place at the right time. Acting as a buyer and re-seller the company had enjoyed high margins by having sources of supply that met the never ending demand.

But from humble though highly profitable beginnings, the company had grown both its customer base and levels of service. But with the proliferation of customer types and enhanced levels of service came a change to making heavy losses.

As sales volumes increased so profitability plummeted. Its share price followed. A tumble to 3% of its highest level. As the CEO owned nearly half the shares, the problems became personal. The other shareholders became highly concerned.

Yet within three months, the declining fortunes of the company were reversed.

Though the company wasn't short of data it had been desperately short of an understanding of what the data was telling the business. And using gross margin as a key measure was at the root of the company's misfortunes

**E**liminating the root causes of the problem became the key to turning the business round.

The project to turn the business round had three objectives:

- To reduce significantly the unit costs of all the processes
- To reduce significantly the capital tied up in stock
- To eliminate customer segments that provided negative net profit

Within a few months all the threads of the analysis were brought together.

1. The process analysis produced robust processes and lower unit costs.
2. The analyses of customer profitability and working capital combined to show that without too much heartache, a business of half the size would leap in profitability.
3. When the dust of re-structuring settled, it settled on only half the original number of buildings.

Cash was now available for R&D, and new products and services to capture the opportunities from the rapidly evolving technology.

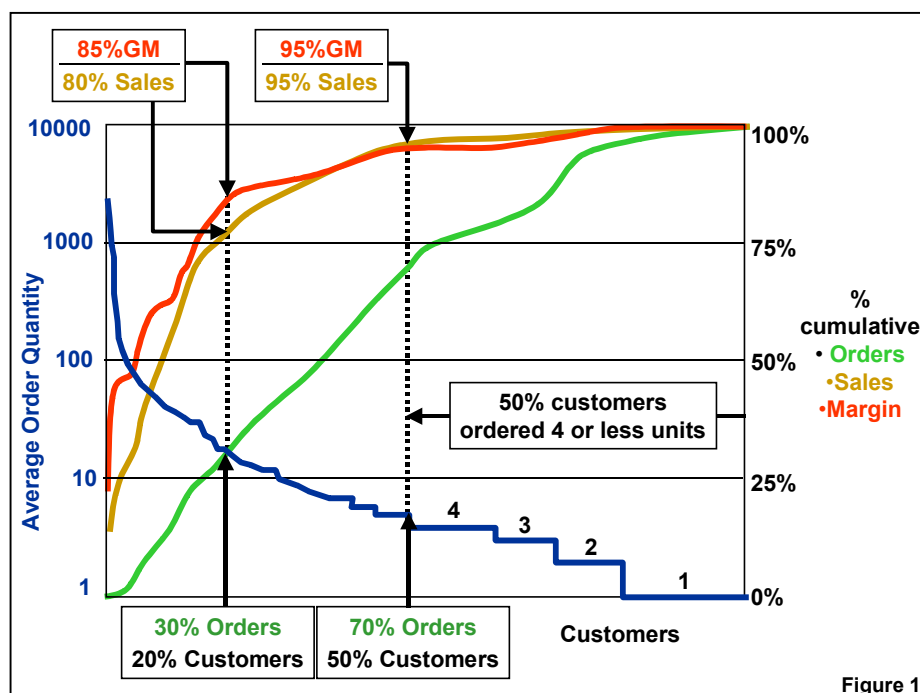


Figure 1

### FLAKY PROCESSES

When companies experience rapid growth, they pass through a phase where everyone can do everyone's job, to one where functions emerge and things have to be done in sequence in a process.

But now the larger business missed deadlines, suffered re-work, lost data, failed promises to customers. Everything contrived to make every day a struggle.

The lack of process robustness was at the root of a growing blame culture and the source of high process costs.

A core team of people drawn from each function led by a Delvin consultant set to work to walk each process to uncover the problems and gauge what could be done to fix them. By working with groups of people representing each process, rapid agreements to changes were brokered followed by an eager desire to get the improvements in place.

### INVENTORY

With the growth in business volumes, a desire to improve service levels and an eye on opportunistic purchases of large quantities of products, the company had acquired large warehousing facilities. They quickly filled up.

However, lots of stock doesn't always mean that the initial objectives for having stock are met.

Current popular products were often out of stock, predictable demand products had unnecessary high stock

cover, and there were mountains of stock of unpopular lines. A lack of forecasting and a history of making poorly justified opportunistic purchases were the root cause.

However, if prices in the market are rising then stock is not a big problem. Unfortunately the opposite was the case. The products died rapidly in the market place. Fashions changed and end consumers wanted the latest models. Prices from the manufacturers reduced inexorably.

The analysis showed that the ability of stock to retain a positive gross margin fell away rapidly after two months. Stock changed from an asset to a liability. The ability of stock to retain a good margin is a key determinant of value creation. In this case, stock was a major source of value erosion.

Much of the warehouse was tied up with stock that could no longer be sold with a positive gross margin!

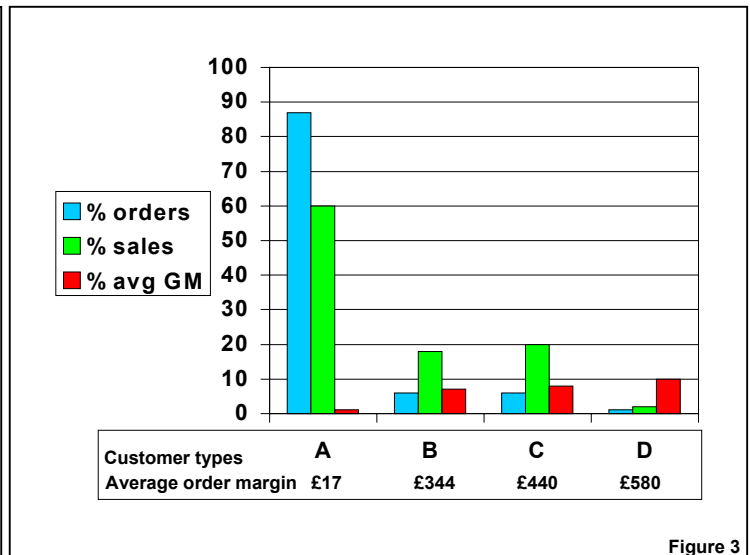
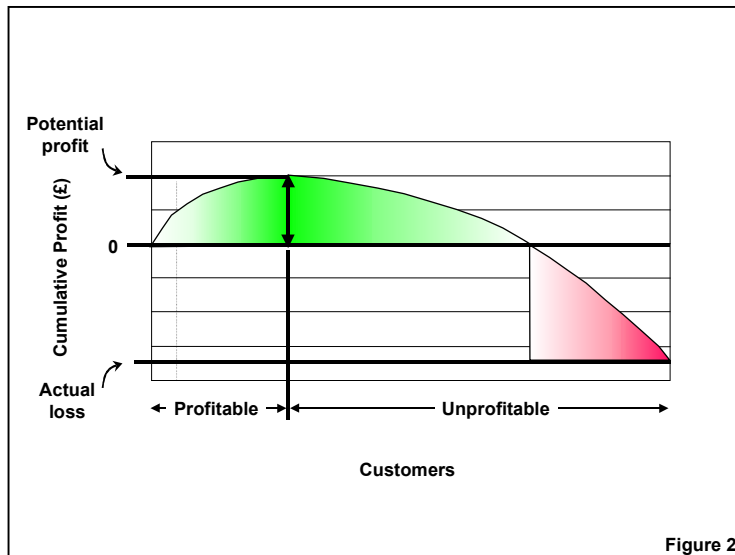
### COST DRIVERS

The analysis then turned to uncovering a number of key relationships in order to understand what was causing the activities throughout the business to occur.

Suspicion fell on the order quantities that customers were placing.

Figure 1 is plotted on the basis of reducing order quantity, from left to right. Cumulative orders, gross margin and sales value for customers showed a startling result.

About 50% of the customers ordered 4 or less units per order. These orders only added the last 5% of sales value and gross margin. But if the gross margins are



still positive, even for the small order quantities, surely this is alright? Don't positive gross margins all make a contribution to overheads?

The real truth is that some types of orders create overheads far higher than the gross margin. Far from believing that a positive gross margin is always good, where the real net profit is negative more volume means ever-increasing losses!

The analysis also found that the overriding cost driver in the business was the number of orders. Each order drove 'order entry' activity, then 'credit check', then 'pick & pack', then 'despatch', then 'invoicing'.

Put another way, 30% of orders from 50% of customers only added 5% of sales and 5% of gross margin.

And the rub? 30% of the costs of the 'overhead' were directly caused by these customers. A cost far greater than the gross margin! Gross margin was exposed as a dangerous measure as it obscured the reality of the impact of the real costs of doing business.

The activity and cost driver analysis had uncovered a major area of value erosion. But what was the impact on net profitability?

### CUSTOMER PROFITABILITY

In figure 2 we see that only around 30% of the customers were making them any money. The rest dragged them down to a significant loss. The analysis exposed a salutary lesson for the company.

By paying its salesforce on gross margin the salesforce was driving the business into the ground. Sales people didn't care if their decisions filled the warehouse with unnecessary stock or that selling costs for low volume business were high, or that the majority of the orders were for very small amounts.

If the net profit was negative but the gross margin positive, they still got their bonus!

But who are the customers that were destroying the business? The analysis then looked at the characteristics of various customer segments.

Figure 3 shows another startling result. Type 'A' Customers, the small High Street Dealers, placed 87% of the orders accounting for over 50% of sales value. But they provided a very small gross margin percentage and a low average order margin. Well below the cost of processing the order! Taken together with the other analyses, these customers were the source of the falling profitability of the business. The business had become simply a stockist for most of its customers!

### BLINDED BY APPARENT SUCCESS

The CEO acknowledged some salutary lessons:

- The company's growth had taken it into customer segments that generated volume, which lulled him into thinking it was becoming a big and profitable business.
- The salesforce were still generating positive gross margins, so weren't complaining.
- The standard financial reports didn't report on net profit at the product or customer level or on the relationship between costs and cost drivers, so everyone was blind to the underlying drift to disaster.