primecompetence

EXPERTISE YOU CAN TRUST

Prime Competence
Herengracht 282
1016 BX Amsterdam
The Netherlands

Tel +31 (0)20 520 9928
Fax +31 (0)20 520 9611

info@primecompetence.com
www.primecompetence.com

WHITEPAPER

FALLING VOLUMES ARE NOT THE PROBLEM

Many Posts point to falling letter volumes as the cause of profit erosion and corporate stress. This article proposes that it is not the falling volumes but rather the Posts response to that decline which is the problem. Often decreasing volume is seen as an existential threat and responded to late and without identifying the real cause of profit erosion. As can been seen looking at the Postal industry volume is no predictor of profit, many small Posts return profit while many large Posts make an operational loss.

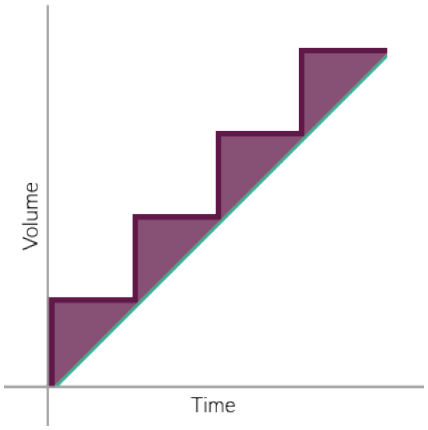
Posts have, for many decades, operated in a predictable and slowly changing environment. This has led to work practices, equipment, products and capability being fixed. The ability to respond to a rapidly evolving market is hampered by this inflexible processing environment. Typically new product has a long time to market, often a high capital cost and a long payback.

This fixed structure also applies to large numbers of transport vehicles following fixed timings and routes. Many Posts have a transport network where trucks leave and arrive at the same places following the same routes daily regardless of volumes and in the absence of an understanding of the demand within their network.

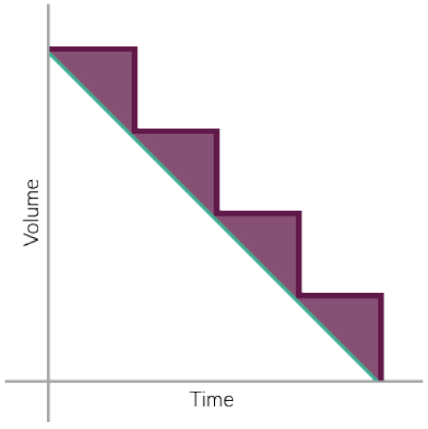
STEP CHANGE

RATHER THAN **CONSTANT ADAPTATION**

With a fixed cost base Posts tend to make large step changes periodically to adjust to volumes both falling and rising. This causes a near constant mismatch between capacity and demand.



The diagram above shows the effect of these step changes as Posts try to match capacity (purple) to a decreasing volume (green). Periodically there are major projects to reset capacity. This often takes the form of major network changes, large capital expenditures on new processing equipment and major process changes. While these are necessary parts of an adaptation to volume decline they tend to align capacity to demand for a short time but eventually they diverge.

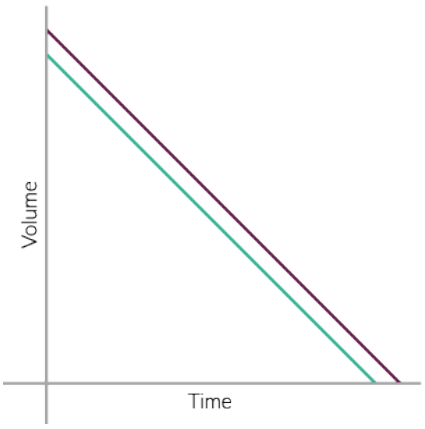


As can be seen from the above even in with a growing volume the match of capacity to volume can cause a divergence from the optimum match.

This phenomenon we call capacity discordance and it equally applies when trying to match capacity to demand in an increasing volume environment.

Ideally capacity should closely match volume for any measurement period. It should be possible to optimise resources to reflect short term or long term fluctuations in demand.

The capacity discordance manifests itself in the Posts bottom line. The further capacity diverges from demand the lower the profit of the organisation. A fixed cost structure and poor information are at the root of this problem. Once these issues are addressed the easier it to bring the two aspects of this discordance together.



The capacity discordance manifests itself in the Posts bottom line. The further capacity diverges from demand the lower the profit of the organisation. A fixed cost structure and poor information are at the root of this problem. Once these issues are addressed the easier it to bring the two aspects of this discordance together.

TRANSFORMING FIXED COST TO VARIABLE COSTS

Work practices

Have the right skills in the right place for only as long as is necessary. Remove, as much as possible, the need for specialised knowledge with systems and processes delivering the information required to perform a task. While it's not practical nor desirable to have a 100% flexible workforce the goal should be a continual optimisation of skills suited to the ebb and flow of demand.

Transport

Provide an easily extensible and low cost capacity to remove the need for trucks driving fixed routes with small loads. Optimise the timing of line haul operations based on current demand and delivery performance. Investigate the use of external transport routes which enable a flexible timetable delivering products where necessary and when necessary.

Processing Equipment

Explore alternate payment models for equipment that closely tie payment to volume. This model should, through pay per piece processing for example a natural contraction or expansion of costs as volumes change.

Processin Capabilities

Ensure your automation platform is open and easily accessible to anyone capable of providing enhanced capability. This enables low cost and short time to market for new products and services. Capability should be enhanced incrementally and be supplied by the organisation best suited to delivering that capability.

Delivery

Ensure delivery operations move towards a knowledge free environment with support from appropriate technologies to ensure the timely delivery of mail in a flexible workforce.

If these 5 areas of operation are managed in a flexible manner and provided with the information necessary when it's required results in an inbuilt ability to adapt and close the gap between demand and capacity. This allows a very close match between the two aspects driving profit.

INFORMATION NOT DATA

Most Posts collect a large amount of data from their day-to-day operations. Typically this data is used to report what happened in the past. Yesterday, last week, last year. Knowing what happened yesterday does not prepare you for what happens today, tomorrow or next week.

What is needed is the real time processing of this Big Data to predict what will happen in the coming hours and use that data to closely match capacity to demand and have the right resources in place to deal with that demand at the lowest possible cost at all times.

In order to achieve this the data must be turned into information in real time with a predictive ability. Information is what can be used to provide insight and facilitate action based on that information. This information can be used to provide greater efficiency in processing, labour and transport from acceptance to delivery.

A fully formed and accurate network model is the first step in making information from data. This model is often implemented in an iterative process trying different combinations of network topology and different equipment and delivery standard constraints. Typically a network model does not have a predictive capability but is rather a static trial and error approach within pre-defined boundary conditions.

What is required is a model that has an ability to provide the optimum solution in real time to the real world fluctuations found every day. This type of model is common in other domains and mature enough to use to drive decisions daily in most aspects of a modern Postal network's operations.

INFORMATION IN THE HANDS OF

THOSE WHO CAN USE IT

Once your data has been transformed to information the key is to get that information into the hands of the person who can use it. This means getting just enough information and no more. Phone apps and web based dashboards are a good method to display information that is easily accessible and gives the information when it's needed.

Many automated processes can be information driven. For example an optimised delivery round could be calculated, downloaded to a GPS and given to anyone to deliver mail. A web based transport bidding system could provide flexible transport capacity that closely match transport to need. Qualified external transport operators could bid on loads and must maintain line haul performance in order to continue bidding. This could provide a flexible extension to an in-house line haul fleet.

THE CHALLENGES

ARE MANY

There are many challenges in moving to a more flexible structure but there are many techniques to assist in the transition. The process is better looked at as a journey rather than a destination. Constant development of the fundamentals necessary to become more flexible are often difficult for an organisation to manage but once these challenges are in hand it becomes the new corporate ethos.