

Keeping tabs on stock orders

How do clothing chains ensure that enough stock is available in all of their stores, and that just the right number in each size and colour is found in every outlet?

It can be quite a juggling act, because retailers do not want to be left with too much stock that eventually have to be sold at a discount.

The allocation of stock to stores is one of the most important processes in the management of a retail chain. Orders have to be placed at the factories months in advance, and quantities depend on the preliminary allocation decisions made by product planners. The finished products are then shipped to distribution centres (DCs), from where they are distributed to individual stores.

Each time a new order arrives at the DCs, the initial allocation decisions are revisited and often adjusted. Retailers decide how many units of each size to assign to every store based on the stock they received and the most recent sales data. Elmien Thom and Stephan Visagie from the Department of Logistics have used operational research principles to develop two models which make light work of such allocation adjustment decisions. The models help to minimise the risk of both over- and understocking of all sizes in all stores and a simulation model is being developed to estimate future sales for each size at each store.

The models are tested within the context of Pep Stores Ltd. (PEP) and are allowing product planners to compare the effect of different allocation models on future sales.

It is not only the retailer that is set to benefit from the research, but also its customers.

"Optimising allocation decisions can save PEP money, because it helps the company to avoid lost sales and having to sell products at a discount," explains Thom. "Savings for PEP means savings for their customers, who are typically not financially strong."

Stephan Visagie and Elmien Thom, Department of Logistics
svisagie@sun.ac.za and 16036115@sun.ac.za



Winemaking skills gave Huguenot settlers the edge

The French Huguenots already knew how to make wine when they settled in the Cape in 1688. Their specialised viticulture skills set them apart from the Dutch settlers who were the first to start farming in the region.

This also gave them the necessary edge to dominate the local wine industry for generations to come.

This is the findings of Johan Fourie and Dieter von Fintel of the Department of Economics, published in an article in the journal *Economic History Review*.

As part of their study, they statistically analysed the surnames of various Huguenots who arrived in the Cape to see whether they were originally from excellent French wine producing regions or not. Researchers often explain the differences in how settlers adapt and flourish in a new colony by focusing on local conditions of production, by looking at institutional differences between cultures, or by the so-called 'first mover' advantage of those who settle first.

Winemaking skills gave the Huguenots who originated from wine-producing areas a sustained competitive advantage above the generic wheat farming skills of the Dutch.

This view can be further enriched by looking at an important supply-side cause: the skills with which the settlers arrive in a new country. Their winemaking skills gave the Huguenots who originated from wine-producing areas a sustained competitive advantage over the generic wheat farming skills of the Dutch that were possible to acquire with more ease.

The study underlines the fact that colonial institutions are not only shaped by whether immigrants settle or not, which legal system they adopt, or their language, religion, or beliefs. They are also influenced by the set of skills, knowledge, and experience brought from their country of origin.

Johan Fourie and Dieter von Fintel, Department of Economics
johanf@sun.ac.za and dieter2@sun.ac.za