

Profit, Not Turnover[©]

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INTRODUCTION

My wife Claire and I have a small nursery. It is not big and grand, more like small and pokey. But it is profitable relative to its size. A big turnover is not important to me — what matters is a profit, because no business big or small will last long without a profit. Our nursery is located on State Highway 3 in central Te Awamutu in the South Waikato (Fig. 1). The property is less than 2 acres; about a quarter acre out the back is waste land, so the nursery only uses about 1½ acres.

A few years ago we sold wholesale and retail but now it is almost only retail. Our retail customers come from all over the Waikato and beyond, but primarily from south of us, including from as far away as Taupo, the Ruapehu area, and New Plymouth. We do not advertise. All we do is arrive at work, open the gate, and make it up as we go along.



Fig. 1. View from the south-west boundary.

Prior to the global financial crisis (GFC), our annual profit almost reached \$200,000 per year. When the GFC happened profit dipped a bit but lately things have normalized. In recent weeks sales have been record breaking. This is probably much the same for everyone here.

So what is it that makes us — or any of us profitable? There are of course many reasons. One of those reasons is management, and in our case, our management approach, and business model, is based on economics.

THE BUS TICKET DILEMMA

A bus owner is barely surviving. Should the bus owner put the price of tickets up, which risks losing market share and a decline in revenue? Or should the bus owner put the price of tickets down and hopefully attract more fare paying passengers, but also risks a decline in revenue?

The inherent question with the “Bus Ticket Dilemma” is what is best for profit: prices going up or prices going down? Everyone will have an opinion on this. My answer though involves some simple economics. Products with a high price elasticity of demand tend to increase in profit as their prices decrease, but only if costs are constrained. Nursery plants have high price elasticity of demand which is a measure of responsiveness

to changes in price. Profit increases as prices decrease, but only if costs are constrained. I think everyone in our industry should memorise this statement.

The demand for a product like plants rises or falls for many reasons. However, there can be no doubt there is one factor that influences spending like no other factor and that is the price of the product.

Some here may already be familiar with this graph, possibly the most basic and well known diagram in the entire field of economics. So what does this diagram tell us about the nature of demand of nursery plants?

The curve (which is really a straight line) slopes downhill and shows an inverse relationship between price and quantity demanded by the market (Fig. 2). At low prices (P_1) there is a relatively high demand (Q_2). As prices rise ($P_1 \rightarrow P_2$), market behavior changes — in effect moves back up along the curve, so that less product is wanted or demanded ($Q_2 \rightarrow Q_1$). We are of course, all familiar with this phenomenon already, if only intuitively though some here may not have seen it presented this way before.

Similarly as prices decline there is movement the other way on the curve and demand increases.

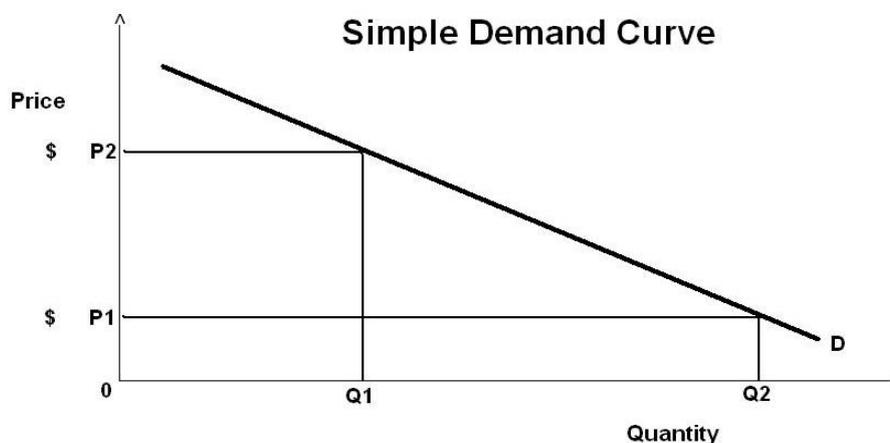


Fig. 2. Demand curve showing relationship between price and quantity.

What this diagram does not show so clearly, is this phenomenon applies to all levels of degree. At the micro level it applies to a single product line and it applies to all the aggregate products of a single business like a nursery or garden centre.

At the macro level, it applies to all the aggregate products of an entire industry. So if all nurseries in the entire industry were to move their prices up — why would anyone expect total demand to increase or even stay the same? The effect of raising all prices is to lower total aggregate demand. This must over time shrink the size of our industry.

Those that advocate higher prices do so for their own reasons, but the aggregate effect of higher prices is to lower total demand. I am not an advocate of higher prices. My blunt reality is: the needs of my business can only be met by giving my customers what they want at the price they are willing to pay for it.

If there is low demand for any specific product, then there is low demand only at a specific price. In my experience if price is reduced, then demand tends to escalate rapidly. I believe the issue of price is an issue (but not the only issue) facing our industry. It is an internal issue.

I also think it is a major mistake to compare prices today with what prices were in 1980. Yet some do. Surely though, what happened in 1980 is largely irrelevant today.

You see we are not competing with each other. The fact is, as a retailer, my biggest competitor is China. Because this country is being flooded with cheap products of everything and anything from China and elsewhere and it makes locally manufactured plants look expensive. It is a matter of relativity and perception.

My bottom line is: if I escalate my retail prices my customers will shop elsewhere and switch to alternative products which provide for equal satisfaction and allow the dollar to go further.

RETAILER RISK FACTORS IN BUYING WHOLESALE PLANTS

I wish to mention about retailer risk factors in buying wholesale plants because in my experience, buying wholesale plants is a problem.

When a retailer buys wholesale plants the profit or loss is not determined by the retail price or retail margin. The profit or loss is actually determined by the amount that ends up in the waste bin. All the profit and more can easily end up in the waste bin.

The reason is simple because as prices rise, the demand falls. Yet plants in containers have a limited shelf life. They are a perishable product. This makes buying wholesale plants very high risk and getting riskier.

This problem is not unique to me. Neither is it a new problem as it has been risky for years. And over the years retailers have developed several strategies or techniques to try and manage the risk. I have identified five techniques and to some extent these techniques are already known by most garden retailers.

GARDEN CENTRE RETAILER RISK MITIGATION TECHNIQUES

- 1) Reduction Technique: Carry less stock — smaller bitsy wholesale purchases — maybe make no purchases.
- 2) Substitution Technique: Replace nursery stock with other lines such as giftware or pet supplies, or a cafeteria.
- 3) Price Humping Technique: Put retail prices up and be damned even if prices hit the stratosphere. The idea is an increased margin covers any stock losses.
 - a) Then the grower sees the high prices and thinks wow, if it is worth that as a retail price then to keep parity I need to hump up my wholesale price which of course increases the risk to the retailer who further increases the retail price. This leads to a higher wholesale price which raises the retail price etc. This process is insane. But it happens.
 - b) Does anyone stop to think raising prices can lower sales further thereby increasing losses? This option over time becomes a downward death spiral. High retail prices where they exist are a symptom of a problem not the problem itself. The underlying problem, the real problem is the perishable nature of plants and the risk of investing in wholesale plants by the retailer. The real problem is one of time decay of plants.
- 4) Discount Technique: With the discount technique the retailer has taken control of supplier nurseries and exercises that control by insisting on a discount at the wholesale price level. This lowers the risk to the retailer, and provides a competitive advantage by encouraging lower retail prices thereby under cutting the competition. This in turn both accelerates and increases throughput, and hopefully lowers any losses. However a couple of awkward questions:
 - a) If it is feasible for growers to sell to one or a few retailers at a lower price, then why not sell to all at the lower price and expand the overall market?
 - b) And second, why do growers play favorites and encourage a single retailer to cause damage to other retailers when the other retailers being adversely affected are also grower's wholesale customers?
- 5) Transfer the Risk Technique: This is the interesting one. Why not transfer the risk back to the wholesaler or grower. The transfer of risk option includes sale or return which has several variants. Why not have the growers carry all or some of the risk? Of course I have no clout to make this happen but others do.

ECONOMIC MODELLING

Those five techniques previously listed are actually examples of small economic models used to try and solve a difficult problem — the problem being how to reduce unacceptable risk to the retailer. It is no coincidence that every one of those models has at

some point been created by retailers and imposed on growers — whether growers like it or not.

There are multiple techniques or multiple economic models that can be designed and used to solve a single problem and there may be other models available that have not yet been tested or even designed.

Economic modeling is a powerful tool, but as the list showed, its use tends to be haphazard and informal. But if its use is taken to its full potential then for many management problems that may arise, system design may be the way to go. I think it is not enough to just keep increasing wholesale prices and to expect retailers and retail customers to accept it.

Economic Modelling-System Design

I think it is not enough to just keep humping up wholesale prices and to expect retailers and retail customers to accept it. A really smart grower would recognize a problem exists and would actually stop (and think) and attempt to design a solution to everyone's advantage. But will it ever actually happen? Will growers ever go beyond the traditional economic model of maximum extraction of revenue from retailers? Is it no surprise independent retailers are steadily disappearing? Is the traditional economic model the industry uses slowly destroying grower's access to the retail market? And what happens when the era of the box stores has passed?

It is not enough for growers to argue that if they do not get enough for their stock then retailers may lose their lines of supply. Such argument tells only half the story.

Consider if retailers do not get enough return to justify the risk when investing in the supply — then growers may lose their lines of access to the market.

But it gets even more complicated. Because both grower and retailer in this inter-dependent relationship are totally reliant on a willing end use customer, not occasionally as an act of freakishly good luck, but every minute of every day, all the time, year after year.

Instead though, what do we actually get? The end use retail customer tends to be forgotten about unless it is for the maximum extraction of revenue. And growers and retailers face off with mutual suspicion, each considering their respective position, while assessing how to manage the other.

I am not averse to buying in wholesale plants but I have a big question mark about how to manage the risk. As things exist it is difficult to near impossible to make a profit from the investment. In fact it can often be difficult to simply do a cost recovery that is get no more than your money back.

And if my predicament applies to most retailers everywhere — which to some extent I think it does — including the box stores — then growers should expect them to react. And it will not be pretty.

As a retailer of plants, I should, in theory at least, be able to buy in all my stock as wholesale purchases and make a reasonable return from the investment. The harsh reality though is I am not given rebates, discounts, or other benefits afforded to others, the playing field is not even, and if I were to buy in all my stock, retail prices would be such that over 90% of my customers would leave — without buying anything.

Of those that did buy something their purchases would be very small — in other words selling less product to less customers — our reputation would die very quick — our market would collapse — frustrated or latent demand would increase — and the general public would spend their recreational dollar elsewhere — probably not even on plants. This cause and effect is well documented in economics, referred to as the substitution effect or the Slutsky effect.

Back then to my little nursery in Te Awamutu. Having a second look at this image some things may not be that obvious (Fig. 3).



Fig. 3. View of nursery from State Highway 3.

First, this property is both our retail site and our production nursery at the same time. It is basic and has no frills, but it does those two jobs. There are no big shade houses, no crop covers, no big flashy propagation facilities, and our only building is the granny cottage at one end. In effect we have the ability to manufacture a reasonable quality product on site using next to nothing. By not having complex facilities there is no capital cost involved, no maintenance cost, and no running or operational cost that go hand in hand with complex facilities.

Another point of interest is just about the entire nursery site is palletized (Figs. 4 and 5). Nearly all stock is processed onto and stored on pallets which can be moved using a forklift on a tractor. The result is huge labour saving. All double handling of stock is avoided as much as possible.



Fig. 4. Nursery site is palletised and easy to move.



Fig. 5. Palletised plants.

For PB 5's (planter bags of about 2.8 L) the cost of using pallets is less than 3¢ per plant over the life of the pallet. Our pallets enhance productivity significantly. So much so that over the years, we can go for months even years without needing a single employee. Claire and I alone can produce 60,000 or more plants per year although it can get a bit tedious doing it all ourselves.

LOW COST PROPAGATION

The last “innovation” I wish to discuss is our propagation setup, which has to be the ultimate in tacky systems.

In 1982 I worked as a technician in another nursery which had big propagation facilities using crop covers, misting systems, and hot beds. The facilities were expensive to build, expensive to maintain, expensive to run, and took up a lot of space. The electricity cost for the hot beds alone was \$1300 per month and that was back in 1982!

Right from the beginning I decided I did not want that sort of propagation setup. Again I wanted to keep it simple, keep it low cost, but still be highly effective. So years and years ago we built these (Fig. 6)!



Fig. 6. Low-cost propagation houses at Payless Plants.

Simple cold frames — no misting required — and no hot beds. These frames you see here cost us \$200 each and that was over 20 years ago. Over the life span of our propagation setup, the maintenance and running cost is no more than \$100 per year! These cold frames are very simple. Each covers 10 m², and is 1 m high at the apex. They are designed to hold 54 propagation trays in each frame (Fig. 7).



Fig. 7. Construction detail for low-cost propagation houses at Payless Plants.

Examples of propagation success rates examples are shown in Table 1. This list gives some idea of the effectiveness of our cold frames. They are very successful and in some ways better than high tech systems. But I would be first to admit that they are definitely not sexy. From this list, we find that some rhododendrons are near impossible to propagate but many cultivars are very easy. We used to also buy in *Olea* or olives as growing on lines and grow them on, but the supplier kept humping up the price so we started propagating our own.

Table 1. Examples of propagation success rates.

Plant	Rooting (%)
Azalea (evergreen)	99
Azalea (deciduous)	50
<i>Camellia</i>	99
<i>Adenandra</i>	60
<i>Griselinia</i>	99
<i>Pittosporum</i>	99
<i>Rhododendron</i>	0-99
Conifer	60-99
<i>Olea</i>	99

In summary our nursery is not lean, it is skeletal, and it is done on purpose — because it makes us profitable. Complexity creates costs. The profit comes from keeping it simple. We have our own economic model, where our costs are constrained, our prices are kept down, and our profit is kept up.

We can produce a 2.5-L thermo pot for an average cost of only \$1.00, or if employees are used, the average cost jumps to \$1.85. The marginal cost of this plant is 65¢.

So anything above our average cost is profit. We do not try to maximize profit per plant. We work to a defined profit and try to maximize profitability by maximizing production and numbers sold.

At normal garden centre prices a smaller grade of this product (Fig. 8) from another nursery retails for \$22.00. But at \$22.00 we would only retail five plants per year instead of 400. Five plants with a margin of \$20.00 provides an annual profit of \$100, whereas 400 of the same plants with a margin of only \$5.00 gives an annual profit of \$2,000, which is a 2,000% profit increase.



Fig. 8. A typical garden center *Adenandra uniflora* (China flower) plant in a 2.5-L thermo pot.

If you think back to the demand curve, prices have to be kept down in order to shift the volume. But if we can shift our volume while still making say a \$4.00 or \$5.00 profit per unit, then over 60,000 units the potential profit, even for a small 1.5 acre nursery, is about \$250,000 per annum.

I would not expect profit to increase by making our product smaller. All we would be doing is lowering the value. Neither would I expect profit to increase by putting our prices up as all we will do is sell fewer products to fewer customers.

We define an acceptable margin per unit and arrange our affairs in such a way that we produce it for the lowest possible cost and sell it for the lowest possible price with the margin being built in as part of the cost per unit. And that is the way it works for us and it works well.

Success is not a secret — it is a system and I want it to be perpetual and sustainable, which means I have no interest in bleeding my customers dry or encouraging them to go elsewhere.

So by now, some here may want to throw something at me! But before you do, ask yourself if I am right or wrong? Is there a better way for us to operate? Maybe, but I have no idea what it is.

Size is not a guarantee of big profit. In many cases though, size will be a guarantee of big costs. Maybe the million dollar profits exist for some, but for others it is an illusion. My question then is where to from here — for us, for you and for our industry?

I'm not sure I have the answer to that. But I do know our pokey little nursery has provided us with no debt for many years, we have substantial accumulated funds, and equity of some millions. Others may not like it, but I know our business model works so if you know of an idea or opportunity that may exist out there, maybe we should have a beer together and explore options.