

THE "MUST KNOWS" OF TRUSS MANUFACTURE (PART 1)

Many years ago (I am certainly not going to admit to how many) after enquiring about how business was going, a truss manufacturer told me that business was great.

He went on to say "my accountant has just told me that I made "x" thousands of dollars profit last year.

"But I am really annoyed because if I had known that prior to 30th June, I could have done something to reduce my tax".

I remember this occasion very clearly, not because the unnamed fabricator lost an opportunity to save a large sum in tax, but because I was somewhat shocked at the realisation that there were businesses, and in particular our customers, who were not making the effort to monitor their business performance.

Now at this point, I must declare that I am not an accountant and do not have any training in financial matters.

So what I am about to say in this article, and I hope in future articles (*TimberTrader* permitting) is an engineer's interpretation of what it takes to run a successful truss manufacturing business.

As an engineer I have always liked the simple solutions, they invariably work better and cost less.

This is the approach I have promoted over the years on how best to run a truss business.

In engineering terms, the formula for a successful truss business can be simply expressed as follows:

$$\text{SALES} - \text{COST} = \text{PROFIT}$$

From this formula you can see that if you "know" your SALES, and "know" your COST, you also know your profit.

Profit, after all, is why we bother to make trusses, and it is reasonable to expect that after a hard days work you have a good idea of what your reward is for that effort.

Waiting till the end of the year, or even the end of the month, is not good enough.

If the business goes off the

possibility of losing an opportunity to make a profit.

Through this article I hope I can illustrate to you how you can monitor your business on at least a daily basis without having to hire a team of accountants.

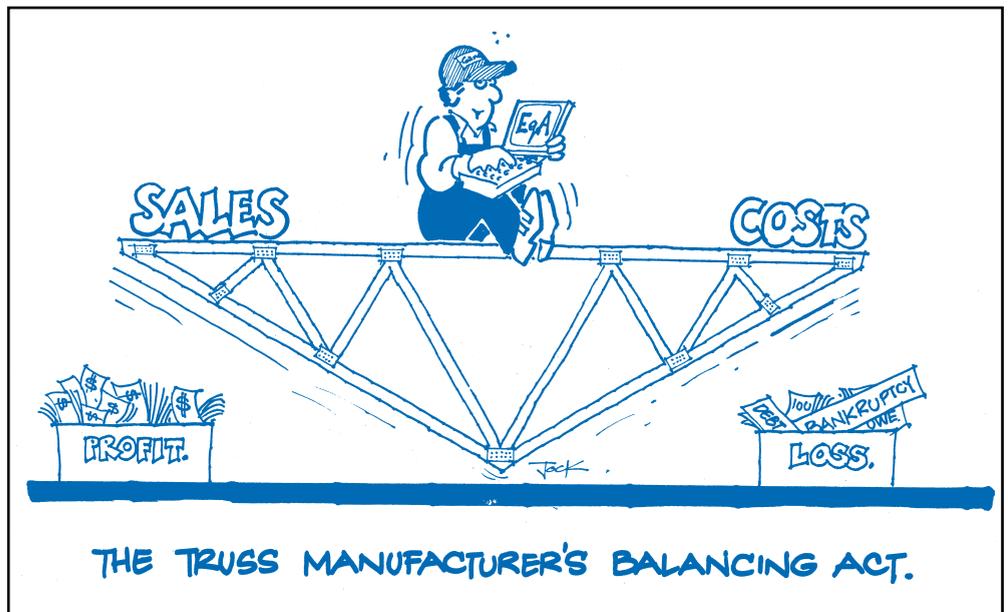
Not that I have anything against accountants (some of my best friends are accountants) but as I said earlier, I like to keep things simple.



by *John Tadich,*
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of each of these groups, which are striving for different objectives that complicate matters beyond simple numbers.

For instance the SALES element of the equation does not simply represent our \$ sales



■ **If you know your production output the profit can be calculated simply on a daily basis.**

rails a lot of damage can be done in four weeks, let alone 12 months.

I have no documented evidence, but I suspect that the large number of small business failures are due to not "knowing" how the business is performing in a timely fashion.

Ideally you should know this on an hour to hour basis so that corrective action can be taken before you run up a large loss and also avoiding the

Lets go back to the formula for success "SALES - COST = PROFIT".

This formula unfortunately is not as simple as I would like, or, as it may seem.

The formula for a successful truss business depends on more than just knowing a series of numbers.

Businesses are comprised of people, i.e.: staff, customers and suppliers.

It is the complex interaction

figures, but has a more general definition of knowing and understanding the needs of your customers.

That is to say, you need to understand what would influence a potential customer to buy trusses from you rather than your competition.

I do not intend to explore this subject in any depth, as I have even fewer qualifications in Marketing.

Please turn page

Except to say, that, in my humble opinion, we should not be selling trusses, but we should be selling a roofing service.

The SALES part of the formula is obviously very important and it is a part of the formula, which needs a great deal of management attention.

We should be concentrating on those aspects that add value to our products, i.e. service, at the same time avoiding the temptation to sell on price, as this creates a downward spiral into low profitability.

The cost element of the formula is where I would like to concentrate today.

Like many businesses, truss manufacture is very volume sensitive.

Small increase in sales can create a large increase in profit and conversely a small drop in sales can cause a large loss.

For this reason, and to provide you with information to make management decisions, it is important to determine your fixed and variable costs, and subsequent break-even point.

The break-even point is a milestone, if you know this figure you know that when your production falls below that level you are generating a loss.

Therefore, if you can measure the value of your production in a simple way, e.g. EqA, you have a means by which to readily determine whether you are making a profit or a loss.

(See Figure 1)

Fixed costs are those items, which the business incurs, whether it produces trusses or not.

e.g. plant lease costs, rent etc.

Variable costs are those which are generated by virtue of making trusses, e.g. plant labour, power, maintenance, etc.

Break-even is that point in production where the volume of work produced generates sufficient revenue to cover both fixed and variable costs, i.e. profit or loss is zero.

Please note that you can only get an accurate indication of your daily profit using this method if you apply your mark-up to the EqA value of the job, that is not including materials.

If you apply a mark-up to consumables, e.g. timber and

connectors, (other than nominal figure to cover wastage) you will not be able to get consistently accurate profit figures on a daily basis.

There are a number of good reasons for not simply marking up materials and labour.

I will go into these reasons in detail in a future article.

However, until then I will simply say that I do not think it is good practice to apply mark-up to materials.

Although I have been somewhat longwinded in

\$1000, and the sales value of a typical truss was \$70, on which your margin was say \$7, then you would need to sell

$1000 \div 7 = 143$ trusses or increase your sales value by some \$10,000 to generate an extra \$1000 to offset the advertising cost.

To assist truss manufacturers to determine their breakeven point and conduct cost benefit exercises like this; Gang-Nail Australia Ltd. has developed a computer program, which enables you to easily create a financial model of your plant.

The EqA system is a complete truss plant management system, which enables managers to:

- Accurately estimate labour costs.
- Monitor production performance.
- Monitor profitability on a daily basis.
- Accurately schedule work.
- Evaluate options of new plant.
- Evaluate product-pricing options.

The EqA program, which

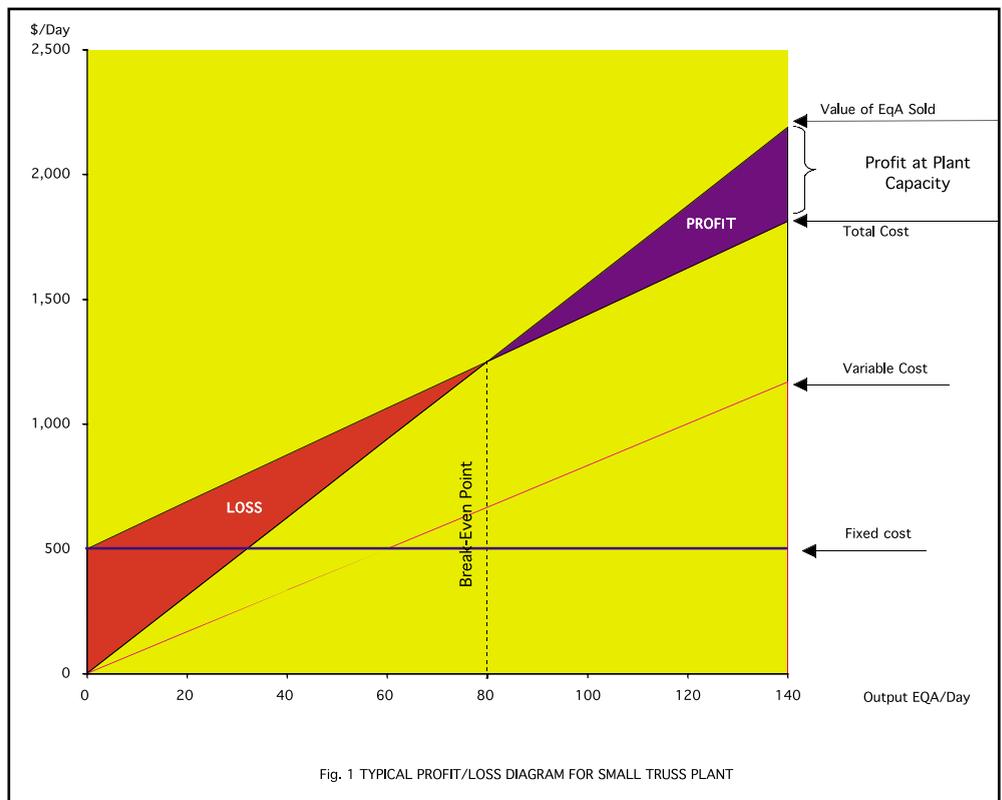


Fig. 1 TYPICAL PROFIT/LOSS DIAGRAM FOR SMALL TRUSS PLANT

getting to the point, this article is about managing your costs.

Substantially, the market place sets the upper value of our products; therefore, to increase our profit margin we must work diligently at reducing our costs.

Before adding to your cost structure you should ask yourself how many extra trusses you will need to sell to generate enough profit to offset these costs? You will be surprised at the answer.

To illustrate this point, if you were considering placing an advertisement in the local paper which was to cost

This program is based on the EqA costing system.

This costing system is now being used by many truss plants in Australia and by an increasing number of plants overseas, although various plate manufacturers have given the concept different names.

Unfortunately, many fabricators are using EqA only as a convenient method of estimating the labour content in the process of manufacturing trusses.

The benefits of the EqA system goes far beyond simply determining the labour content of trusses

provides you with an invaluable tool to do these important management tasks, is simple to use, very portable and you do not need any special financial skills.

The program is designed in question and answer format, and is suitable for the smaller or the larger truss plant alike.

If you do not already have a copy, give your Gang-Nail Australia Ltd. representative a call.

In future articles I would like to explore other aspects of costing trusses and evaluating the impact of investment in new equipment.