# Efrat's Nuggets By: Eliyahu M. Goldratt and Efrat Tal 

## Efrat's nugget - 3: <br> Immunizing against competitors' price reduction

## (Inventory turns offer; Sales)

One of the reservations initially raised by our clients' sales people, regarding the inventory turns offer, is that even though they (at last) see the benefits of that offer to their prospects (distributors and/or retailers - resellers), a competitor can still easily win by simply reducing prices.

Not only that there is a decisive answer for such a reservation, but its explanation deepens the sales force understanding of their clients.

For the sales force to be effective in selling the inventory turns offer, they must internalize two aspects in which their clients (the resellers) differ from their own company (manufacturer). First, most of a reseller's cash ( $>90 \%$ ) is tied up in inventory, whereas a large part of a manufacturer's cash ( $>50 \%$ ) is invested in the infrastructure (machines, buildings, designs, etc). A second significant difference is the ability to use cash in order to increase sales. For a manufacturer to double its sales, much more than cash is needed; it requires a lot of time to find clientslmarkets, develop and design new products, gear up capacity, and so on and so forth. Whereas for a reseller, more cash can be directly (and quickly) translated to business growth or expansion, whether in the form of opening new stores $\operatorname{selling}$ points, or by enlarging the portfolio of products carried.

These two differences cause reseller to relate to their company as an investor relates to an investment plan in a bank: the inventory is analogous to the money invested, money which bears interest (as aforesaid, most of a reseller's cash is invested in inventory and more cash can easily be utilized to increased sales). Obviously, Inventory turns are of a prime importance for a reseller; doubling inventory turns is like doubling the interest rate for an investor.

Take an investor who invests $5000 \$$ (equivalent to reseller's investment in inventory) in a bank investment plan that yields net profit of 500\$ a year. In other words, the interest - the return on investment (ROI) - is $10 \%$. Now, this investor is offered to move to a second investment plan, in which he can cut his investment by half without
damaging the yearly net profit, meaning getting the same $500 \$$ over an investment of only $2500 \$$ (the interest of this second plan is $20 \%$ ). The investor would obviously switch to the new plan in a split of a second. He has an excellent reason to do so: he now has an extra free $2500 \$$ he can invest in a similar manner, thus doubling the profit.

Our inventory turns offer gives the exact same benefits for the resellers. Table 1 shows the effect of our proposal, given a distributor which margin is $20 \%$, operating expenses (OE) are 900\$, yearly sales - $6000 \$$ and which initially holds (on average) $1000 \$$ worth of inventory. We conservatively assume that the inventory turns offer will cut the inventory level by half, and improve sales from $6000 \$$ to $7000 \$$ through lowering shortages.

Table 1

|  | Margin | Yearly <br> sales | Inventory <br> level(inv.) | Inventory <br> turns | Net profit (NP) <br> (Margin x Sales-OE) | ROI <br> (NP/inv.) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Current | $20 \%$ | $6000 \$$ | $1000 \$$ | $\mathbf{6}$ | $300 \$$ | $\mathbf{3 0 \%}$ |
| Our <br> proposal | $20 \%$ | $7000 \$$ | $500 \$$ | $\mathbf{1 4}$ | $500 \$ *$ | $\mathbf{1 0 0 \%}$ |
| $(300 / 1000)$ | $(20 \% x 6000-900)$ | $(3000)$ |  |  |  |  |

* This new net profit is significantly larger compared to the original, even though the investment was cut in half. Note that investing the freed up cash will result in (approximately) doubling this value!

Thanks to the jump in inventory turns, our client's proposal brings the distributor's ROI to sharply climb from $30 \%$ to $100 \%$. On every invested dollar the distributor will now make a whole dollar, instead of 30 cents. The above numbers leave no doubt as for the huge benefit that resellers draw from this unique service, provided by the manufacturer. That gives the manufacturer a real decisive competitive edge - his competitors cannot compete with what he offers to the resellers, since they just don't have the mind set to implement the required culture (and mechanisms) for providing such service.

Yet, the fact that our manufacturer plays solo on the field - has no competition in giving the much beneficial service he provides - does not mean that his competitors won't try to play on a different field. They do not have such a unique service to offer,
but they can offer something else, not less important in the eyes of the reseller: lower prices. Lower prices can improve the reseller's ROI significantly as well, through increasing the margin (assuming same selling price of the reseller), as shown in table 2. Using the above example, with a $10 \%$ discount, the competitor has matched our client's proposal, in terms of ROI.

Table 2
$\left.\begin{array}{|l|c|l|c|c|c|l|}\hline & \text { Margin } & \begin{array}{l}\text { Yearly } \\ \text { sales }\end{array} & \begin{array}{l}\text { Inventory } \\ \text { level(inv.) }\end{array} & \begin{array}{l}\text { Inventory } \\ \text { turns }\end{array} & \begin{array}{l}\text { Net profit (NP) } \\ \text { (Margin*Sales-OE) }\end{array} & \begin{array}{l}\text { ROI } \\ \text { (NP/inv.) }\end{array} \\ \hline \begin{array}{l}\text { Competitor's } \\ \mathbf{1 0 \%} \text { discount }\end{array} & \sim 30 \% & 6000 \$ & 900 \$ & \sim 6.5 & \sim 900 \$ & \sim \mathbf{1 0 0 \%} \\ \text { (after 10\% } \\ \text { discount) }\end{array}\right)$

Till now the answer we had against this threat, of price-reduction offers to resellers by our client's competitors, was: "when was the last time you gave flat $10 \%$ reduction in price?". But when needed, give the striking answer, the one which will enable our client not only to play on a different and better field than his competitors, but to easily win them on their field too - on the field of price war:

The competitors discount had almost no impact on the distributor's inventory turns it is still less than half compared to what we offer. This advantage makes the ROI more sensitive to price reduction - in other words, it enables our client (the manufacturer) to offer a much lower discount than the competitor, while causing a much higher ROI for his distributor. Using the same example (table 3) you can see the effect of a $5 \%$ only discount by our client, as an answer to his competitor's $10 \%$ discount: the ROI gap is again opened wide (even wider than before - now our client has an advantage of $80 \%$ over its competitor, compared to $70 \%$ earlier).

Table 3

|  | Margin | Yearly <br> sales | Inventory <br> level(inv.) | Inventory <br> turns | Net profit (NP) <br> (Margin x Sales- <br> OE) | ROI <br> (NP/inv.) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Competitor's <br> $\mathbf{1 0 \%}$ discount | $\sim 30 \%{ }^{* *}$ | $6000 \$$ | $900 \$$ <br> (after 10\% <br> discount) | $\sim 6.5$ | $\sim 900 \$$ | $\sim \mathbf{1 0 0 \%}$ |
| Our client's <br> $\mathbf{5 \%}$ discount | $\sim 25 \% * *$ | $7000 \$$ | $475 \$$ | $\sim 14.5$ | $\sim 850 \$ *$ | $\sim \mathbf{1 8 0 \%}$ |

* Again, this profit number is not representing the true impact, since investing the freed up cash will result in approximately doubling this net profit value.
** For the nitpickers: this is not a precise calculation, since a $10 \%$ discount actually means $28 \%$ margins and not $30 \%$, and $5 \%$ discount means $24 \%$ margins. The precise calculation shows a similar ROI difference, with an even greater ratio in favor of our client: $164 \%$ vs. $86 \%$.

When for every discount the competitor offers to the distributors, our client can offer a much better proposal in half the discount and win the deal, it can't take long before the competitor will realize he should admit defeat (then, of course, there will be no longer any need for our client to reduce prices). This realization makes our proposal bullet-proof against price war.

