



The Short Payback Edict

Best Practices in action or Recipe for a Dinosaur?

In this time of expanding globalization, corporations who were previously successful under protected or semi protected local or regional markets now fall into 3 categories:

- 1) Those that are successfully transitioning and expanding marketshare.
- 2) Those that are minimizing profit level declines by reducing costs. ROI decreases annually or at best remains stagnant by reducing marketshare.
- 3) Those that are failing or have already failed. They have either totally disappeared or are under a transitional ownership characterized by "rationalization", plant closures, outsourcing and product line reductions. All are downsizing with the goal of an eventual profitable sale to a new longer term owner.

If we were to walk into a lobby of any of the above companies, however, we would invariably see at least some of current buzzwords prominently displayed. "Lean Manufacturing"; "Best Practices"; "ISO"; "QSO"; the list goes on ad infinitum. A casual observer could not be faulted for coming to the conclusion that membership in specific organizations or adherence to these mantras is the recipe for success today. Certainly not the case when one reads the financials however.

Today we will look at one of the differences in day to day business decisions in the first two groups. Group three is of no significance since management decisions are not based on medium and long term business viability but rather on the goal of selling the business at a profit.

Let's look at a common scenario: Productivity enhancing proposal with a 2 year payback is submitted to management. In a Group 2 company, this proposal is rejected because it is outside the mandated payback timeframe. In a Group 1 company, the proposal would go through the established management system. The project would be judged on it's own merits and how this change fits into the long term plans of the company. Typically, the project would be given approval if the product's remaining lifespan was greater than the payback period.

Let's look at how these differences affect future performance.

Project:

Capital cost: 100 units;

Savings: 50 units/annum

Assume: capital borrowed in the marketplace;

Assume: 10 year lifespan with \$0 residual value

Results

42% ROI by the end of year 3

142% by year 5

344% by year 10.

Even when adding in 5%/annum for operations/maintenance costs; the results are 27%, 117%, 294% respectively.

If the Group 1 company uses these saved \$ to reinvest in another project with similar payback dynamics in year 4, then by year 8 they will have a 100 unit/year cost advantage over their Group 2 competitor.

Accumulated cost advantage (units)

Year	Group 1	Group 2
1		4.2
2		6.3
3	42.7	
4	92.8	
5	142.9	
6	193	
7	244.1	
8	294.2	
9	344.3	
10	394.4	

The business case for 2 year versus 1 year paybacks is clear. The same type of results will occur when comparing 3 or 4 year payback models versus shorter timeframes.

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Conclusion:

If you want competitive advantage, a longer payback period is one of the necessary processes. Or stated another way; the odds are stacked in your competitors' favor if they use a longer payback business model.

However this is only part of the reality. "In a free market system; the selling price, calculated in Day 1 dollars, will decrease incrementally with each unit sold." In other words "What you make today will sell for less tomorrow". This is true for all products when measured over time. Occasionally, this can be obscured in the short term due to outside factors such as raw material shortages or political upheavals or supply/demand curve changes due to the natural ebb and flow of a free market system. Companies operating in the Group 2 model are simply ignoring or do not fully understand this basic lesson of Economics 101.

Looking at the above table, Group 1 companies have free capital starting in Year 3. This can be used to increase profits, pay down debt, reinvest in new productivity processes or invest in R&D. Importantly, they are also more able to cope with selling price decreases versus their Group 2 competitors.

Options:

Group 1 companies use all options at their disposal to gain advantage. On the other hand, it is not unusual to see Group 2 organizations where some of the office and I.T. hardware is leased and/or where some managers are driving leased automobiles. Yet when it comes to the heart of the business - the factory floor - leasing options have never been explored.

Let's look at the above table again. A 2 year lease to own deal in which the monthly lease equals the productivity \$ saving yields a 50% return/annum starting in year 3. That's 150% return accumulated by the end of year 5; 400% by the end of year 10. All this at NO capital cost to the organization.

Let's look at an actual project:

Project cost: \$219 k
 Saving: \$100k/annum
 36 monthly payments of \$6.8k
 Monthly free cash flow increase during lease: \$3.2 k
 Buyout: \$21.9k in Month 37

Free Capital (k)		
Year	Year	Accumulated
1	36.2	36.2
2	38.4	74.6
3	40.6	115.2
4	98.1	213.3
5	120	333.3
6	120	453.3
7	120	573.3
8	120	693.3
9	120	813.3
10	120	933.3

Analysis:

- A) Free capital is generated from day 1.
- B) At the end of month 37, the equipment can be given away and the company is still ahead \$104k.
- C) At the end of Year 5, company is ahead \$333k or 150% of the value of the project.
- D) At the end of Year 10, free capital is over \$900k or 426% of the value of the project.

All this has been done with \$0 capital input!

As the above examples show, in order to ensure medium and long term competitiveness of the organization; the viability of each project must be judged on it's overall value.

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