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"Those who cannot remember the past are condemned to repeat it." - George Santayana

"We can't solve problems by using the same kind of thinking we used when we created them." - Albert Einstein

Winter 2011

Dear Executive:

Recently, I posted the following questions on LinkedIn, "Do accountants bear much of the blame for the decline in U.S. manufacturing over the past quarter century? Have accountants' ignorance of, apathy toward, or lack of influence over sound cost and performance measurement methods greatly influenced the low quality decisions that drove manufacturers offshore or out of business altogether?" As I had hoped, my questions drew a lot of responses, most of which took the view that accountants had nothing to do with manufacturing's decline, the decline was just capitalism doing what it is designed to do, and that we should stop crying, face up to the facts, and move forward into the future – based, of course, on the wonderful "facts" provided by accountants.

Although I would never claim that accountants were responsible for the decline in U. S. manufacturing, I do believe that they served as primary enablers in making the decline as sharp and deep as it has turned out to be. Had accountants done a better job of navigation for U. S. manufacturing firms, the landing might have been softer and the sea-level at which the landing took place higher.

The decline in U. S. manufacturing was inevitable as the bombed-out industrial bases of other "industrialized" nations were slowly rebuilt after World War II while U. S. manufacturers – thinking they were the world leaders because of their manufacturing expertise, not the fact that two oceans had protected them from destruction during the war – doddered along fat and prosperous using old facilities, old technology, and old ideas. High world-wide demand for manufactured goods combined with the fact the U. S. was the only country with capacity to meet that demand lulled U. S. manufacturers into their false sense of complacency. They even sent some advocates of groundbreaking new ideas – like W. Edward Deming – packing, making it necessary for them to promote their new ideas in other countries.

While this rebuilding was taking place in other industrialized nations, nations not known for their industrial might – most notably China – began "industrializing" and becoming important players on the world's manufacturing stage. As the world-wide supply of manufacturing capability grew at a pace faster than the world-wide demand for manufactured goods, it was inevitable that the share held by a country with old facilities, old technology, and old ideas decline. As the demand later grew, that country would also be chosen to fill less and less of that increased demand. The net result was a decline in the country's manufacturing – a decline that was inevitable.

Like the decline in U. S. manufacturing, earthquakes are also inevitable. They are a natural result of the forces that form our planet. The amount of devastation caused by those earthquakes, however, is not inevitable. The damage done by earthquakes can be moderated by learning lessons from the past and taking appropriate actions; like changing building codes, improving earthquake forecasting techniques, expanding citizen education, preparing for post-quake emergency actions, and encouraging citizens to keep individual earthquake survival kits. In the same way, the damage done to U. S. businesses by inevitable demographic, political, or economic forces could have been moderated if those businesses hadn't been shooting themselves in the foot with low-quality business decisions based on inaccurate and irrelevant cost and performance measurement information. To make high-quality, well-informed business decisions and take economically sound business actions, however, U. S. manufacturers require accurate and relevant cost and performance measures that reflect the economic fundamentals underlying their businesses – information that accounting has failed – and often refused – to provide.

Only by examining the past can we understand how the traditional cost and performance measures championed by accountants and used by decision makers at manufacturers caused them to pour gasoline, instead of water, on the fire that consumed their livelihoods.

Accounting Measurements in General

I believe it is generally-accepted principle in business that "what gets measured gets done" – if you aren't measuring something, it's unlikely that anyone will pay much attention to it and if you are measuring something inappropriately, it's a sure thing that managers and decision makers will act inappropriately. As the adage goes, "Find a stupid way to measure my performance and I guarantee you I'll act stupid."

Accounting's measurements set the overall measurement tone for the company – a tone that has led to short-sighted decisions and actions that damage the long-run viability of U. S. manufacturing (these measures are not exclusive to manufacturers and have wrought havoc economically in other industries as well). Accounting puts a great deal of emphasis on historical measurements between two very specific points in time; a month, a quarter, or a year. This leads to a focus on making each month, quarter or year look good to the detriment to future periods.

We all know of instances where unneeded inventory was built up at the end of a period to absorb overhead and "make more money." Back when its top executives were accountants, Chrysler used to fill the Michigan State Fair Grounds with unsold cars at year end to increase the company's reported profits. Archie McCardell built thousands of unordered truck tractors in the early 1980s to increase reported profits shortly before International Harvester bit the dust. Companies regularly cut back on research and development, marketing, and maintenance to meet current profit targets (not because they don't have the wherewithal to pay for them) even though they know they will have to spend much greater amounts to make up for such actions at a later date.

These are just a few of the perfectly legal (I hesitate to say "legitimate") actions management has learned to take to improve today's earnings at the expense of tomorrow's results. I'm sure any accountant can come up with many more…and they probably have during their careers. Accounting's emphasis on measurements for specific, arbitrarily defined periods of time (they are, after all, based on moon and earth orbits, both obviously important financial periods) while ignoring the future impact of actions taken during those periods, leads to decisions that give the illusion of profitability while damaging the organization over the long-term.

True Business Economics vs. Accounting Measurements

It is well over a quarter century since the dangers of using traditional costing methods to develop decision support and performance measurement information were clearly documented by the likes of Kaplan, Cooper and Johnson. Since then a vast body of knowledge and experience has been accumulated, documented and liberally disseminated by scores of experienced professionals, including solutions to the "costing problem" for organizations of any size and in any industry. Yet the cost measurement and management information provided to decision makers by accountants at most U. S. manufacturers continued – and continues – to be the same incomplete, simplistic and over-generalized horsefeathers that their predecessors provided in the 1950s. Managing a modern manufacturing organization using outdated cost measurement methods is tantamount to sending out the cavalry to defend against a corps of M-1 tanks. The chances of winning such a battle are pretty bleak.

I've documented many of the shortcomings of traditional costing measures and methods in articles, executive letters, books, and presentations for a quarter century, so I won't discuss them in detail here. I will, however, summarize a few of the major problems.

Basic Cost Model Architecture

Direct labor-based overhead assignment supplemented by a "G&A rate" that spreads all non-inventoriable costs (according to GAAP) like peanut butter continues to be the norm at most manufacturers despite the fact that such a model seldom comes close to reflecting the fundamental economics that underlie the business. The basic cause-and-effect relationships that must drive the design of any effective cost model are totally ignored. Relationships overlooked by most models include (but are not limited to):

- The costs of activities that support raw materials, purchased components and outside manufacturing services are seldom linked to the goods and services they support. Although most outsourcing and offshoring decisions may have been economically appropriate, many of them were not appropriate due this accounting oversight. I know of one manufacturer (no longer in business) that used offshoring to reduce the purchase price of a category of components by $3 million. The only catch was that it increased its other costs by $3.5 million. The additional costs were all buried in its manufacturing overhead and G&A rates. Had the company linked costs driven by offshore components to those components, such a costly mistake would have been avoided.
- The cost of in-process movement and storage is ignored. As a consequence, the economic benefit of shortening dock-to-dock cycle times and eliminating non-value adding work that occurs during the production process appears to be non-existent.
- Manufacturing batch-level costs are buried in overhead masking the true cost of low-volume vs. high-volume products as well as the cost of capacity lost during set-ups and changeovers.
- Post-manufacturing costs – particularly finished goods storage and order fulfillment – are buried in overhead. Products shipped immediately upon completion bear the cost of storing and handling those products that are held and shipped as released.
- Costs that support specific product lines, markets or customers lie buried in overhead or G&A rates making it impossible to measure true product, market or customer profitability.

To these shortcomings you can add the fundamental disconnect between the costs incurred in performing value-adding activities, the assignment of those costs to the appropriate activities, and the drivers used to assign the costs to products.

Definitions of Cost

Allowing GAAP to define costs also masks the true cost of operating a manufacturer. A prime example of this is seen in the way GAAP measures the cost of manufacturing equipment. The cost of capital tied up in a company's manufacturing equipment – a true time-driven fixed cost – is completely ignored while a sunk cost – which is totally irrelevant according to Cost Accounting 101 – is accounted for in great detail as "depreciation expense" and treated as a critical fixed cost. Such a costing method fails to differentiate between the fixed annual cost of a machine worth $500 thousand and one worth $25 thousand. At the same time, it will tell the manufacturer that there is no fixed cost whatsoever related to fully-depreciated piece equipment that is worth $500,000 if sold on the open market. Both the failure to include a cost of capital for manufacturing equipment and the belief that GAAP-based, time-driven depreciation expense represents some rational economic truth misleads manufacturing's decision makers.

The failure to incorporate a cost of capital also distorts the cost of activities that are linked to working capital. The costs of raw materials and purchased components (including funds tied up by letters of credit), in-process inventory and finished goods are all understated due to the failure to attach a cost of capital. As a consequence, the cost of increased inventory and savings from inventory reductions – especially those driven by lean initiatives – are both understated.

GAAP also assumes the money spent during a specific accounting periods represents the true "cost" of operating at a manufacturer. It is not true, however, that cutting back on maintenance, marketing or research and development reduces a manufacturer's cost; such moves only reduce the amount expended during a specific period of time and will undoubtedly result in much higher cumulative total costs as the company catches up in subsequent periods.

Basic Performance Measures

Performance metrics is a major subject in and of itself. Since this letter is intended to prove a point, not to be a comprehensive tome on the subject, I'll just mention one universal, dysfunctional performance measure used by the vast majority of manufacturers – profit as a percentage of sales (or its cousin, total cost markup percentage).

The basic measure of economic success for a manufacturer is return on investment. If a manufacturer's profit as a percentage of sales is 20%, but that 20% results in an ROI of 2%, it's not a very successful company. If, however, its profit as a percentage of sales is 2% and that 2% results in an ROI of 20%, the company is a real winner. Why then is profit as a percentage of sales (or total cost markup percentage) used as a measure of value for the manufacturer's individual products, product lines, customers or markets? Isn't there a disconnect here? It's like having an ultimate goal of winning as many games as possible during a season but measuring each game's success by how many points you scored without regard to how many the opponent scored.

Including a cost of capital in the company's cost model makes it possible to measure the value of each component part of a manufacturer's portfolio of business in relation to the company's target ROI – a much more appropriate measure. Absent a cost of capital, measuring the value of products, customers, etc. using profit as a percentage of value added instead of profit as a percentage of sales gives management a much more relevant measure of product or customer value.

These are just some of the issues that resulted in accountants' contribution to the decline in U. S. Manufacturing. You can find more detailed discussions of these and other issues in the

publications area on my website – www.dthicksco.com – as well as in my books and articles. My most recent book, *I May Be Wrong, But I Doubt It: How Accounting Undermines Profitability*, addresses these topics almost exclusively.

Summary

Although demographic, political and economic forces made a decline in U. S. manufacturing inevitable, accountants' failure to provide decision makers with accurate and relevant cost and performance information undoubtedly resulted in a more severe fall than was necessary. You can't convince me that pricing, investment, sourcing, and other critical decisions based on economically sound information instead of accounting's horsefeathers wouldn't have softened the blow. No one can determine whether it would have been 1%, 5% or 10% less severe, but good decision support information based on sound economic models does result in higher quality decisions which do, in turn, lead to better financial performance.

Perhaps some accountants simply weren't aware of the problem, perhaps some didn't think it was their responsibility to fight for change, perhaps they were simply too busy recording how poorly their company was doing and complying with a never-ending avalanche of rules and regulations and perhaps some simply didn't have enough influence to get their company to change. Whatever the case, accountants do bear some – maybe not a major portion, but some – of the responsibility for the decline in our nation's manufacturing.

The problem for the future is that accountants at most manufacturers have not yet accepted their role as business navigator and continue to provide management with horsefeathers instead of quality decision support information. Let's hope they see the light soon or the health of U. S. manufacturers (as well as other industries) may continue to decline, not just due to outside influences, but due in great part to avoidable self-inflicted wounds.

I hope you all survived the winter in good shape and are well into a successful 2011. I look forward to hearing from any of you who have questions or comments regarding this quarter's letter. As always, please feel free to forward a copy of this letter to anyone you believe would be interested.

Very truly yours,

Doug

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President