

SIX LEVELS OF FINANCIAL KNOWLEDGE: SELF ASSESSMENT TOOL

Level 1 Financial Statements

What does Level 1 Knowledge entail?

The organization can keep score in an aggregate sense. It can track cash, inventories, receivables, payables, etc. It can create periodic financial statements (P&L, Balance Sheet, Statement of Cash Flows). It can perform aggregate budgeting.

Level 1 financial information is the language of the financial community, including investors or other providers of capital. Without this basic, but important, information, there is little to talk about. However, this information does not help much with internal analysis of operations or in making good day-to-day operating decisions.

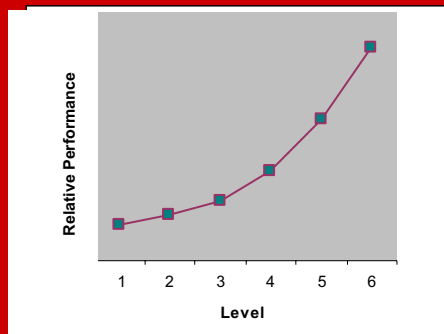
How do I know if my company is at Level 1?

At Level 1, management:

- Generates regular income statements and balance sheets.
- Calculates and analyzes key performance ratios with respect to time periods or industry benchmarks.
- Understands how to access the capacity for growth in profits given current levels of financial performance.
- Can engage in discussions with providers of capital.

If I'm at Level 1, why should I move to Level 2 knowledge?

Level 2 knowledge enables management to make more intelligent decisions about operations. This level of knowledge facilitates more effective pricing decisions, negotiations, resource acquisition/disposal decisions, etc., by more effectively isolating those factors that change with changes in business activity.



Level 2 Basic Cost-Volume-Profit

What does Level 2 Knowledge entail?

Level 2 moves one step beyond “keeping score” (producing financial reports). The business has a consistent understanding of output and its measurement. It can readily identify fixed and variable costs, and the concept of contribution margin is a regular component of the financial tool kit.

Level 2 introduces the knowledge of how changes in output impact revenue, cost and profit. The organization understands fixed and variable costs per unit and uses the concept to make operating decisions. Management understands breakeven levels and the concept of operating leverage (which is essentially the proportion of operating costs that remain fixed).

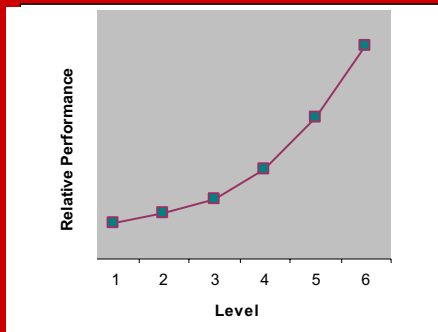
How do I know if my company is at Level 2?

The following characteristics are a part of Level 2 knowledge. In addition to financial statements that report results in term of dollars management reports include:

- Traceable units, e.g. tons.
- Variable cost per unit of output.
- Fixed costs (both cash and total).
- Calculations such as contribution margin, breakeven, operating leverage and unit cost.

If I’m at Level 2, why should I move to Level 3 knowledge?

Level 2 knowledge means management understands what it takes to make a profit; Level 3 incorporates the concept of Return on Assets (ROA). As management (or investors) choose where to invest cash, they will do so in areas that are expected to produce the greatest ROA, balanced, of course, by the risks associated with the investment. Managers within a unit or division of a larger company should want to understand how their operating decisions or recommendations for additional capital expenditures will impact ROA.



Level 3 **Substantive Cost-Volume-Profit**

What does Level 3 Knowledge entail?

Level 3 knowledge integrates balance sheet considerations into the concept of cost-volume-profit, or C-V-P. Drivers of profitability – as measured now by Return on Assets (ROA) – are routinely assessed and this knowledge is a part of decision making, resource allocation, customer account profitability, etc.

At Level 3, management understands what drives the success of the business, using a specified ROA as the goal. Multiple factors identified below play an integral part in the analysis, and management understands that changes in single variables, such as price, materials cost or volume, affect a broader range of items on both the income statement and balance sheet.

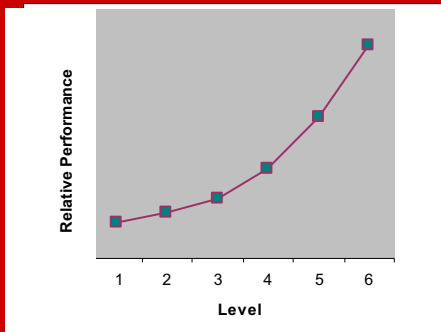
How do I know if my company is at Level 3?

At Level 3, management:

- Understands that ROA drives the business.
- Has defined a set of cost/volume/profit operating categories tied to ROA.
- Understands the breadth of impact that changes in certain operating variables have.
- Can identify profitability drivers.
- Can create policy that supports required returns.

If I'm at Level 3, why should I move to Level 4 knowledge?

Level 4 moves beyond the accounting numbers to take engineering and process constraints that are specific to the operations into account. At this level, management begins to consider the impact that throughput and output have on profitability. Moving to Level 4 knowledge typically offers opportunity to increase profits significantly.



Level 4 Throughput Based Understanding

What does Level 4 Knowledge entail?

Throughput, as opposed to “just” output, has become the focus of operations. Engineering and processing constraints are recognized and, therefore, more effective decisions regarding product mix and resource utilization become a part of management considerations. Level 4 knowledge integrates an understanding of what is possible to produce based on production capabilities with an understanding of what products provide the greatest contribution margins. Management then makes decisions based on optimizing profits and ROA within the constraints of the plant.

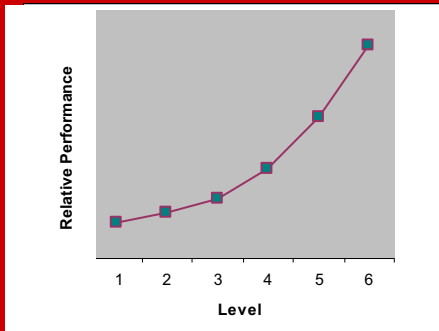
How do I know if my company is at Level 4?

Your operation has reached Level 4 knowledge when:

- The business has a throughput focus.
- Management has a fundamental knowledge of input / throughput / output recipes.
- The primary transformation constraints are known (constraint-based thinking at the margin has become ingrained.)
- “Simultaneous” operating relationships are an integral part of financial relationships.

If I’m at Level 4, why should I move to Level 5 knowledge?

Level 5 moves from simultaneous constraints to simultaneous optimization – every step in the manufacturing process is contributing optimally to operating profit within the existing constraints. It also gives management the ability to explore the impact on profits if additional increments of resources were available.



Level 5 Enterprise Performance Management

What does Level 5 Knowledge entail?

At least in a planning mode, the business can simultaneously optimize across multiple inputs/costs/recipes/constraints/outputs. The methodology of marginal economics has moved from the theoretical to the practical, and the concept of opportunity cost is readily understood and deployed in decision making. Capacity management is multidimensional in the sense that knowledge of multiple, interconnected constraints is a key component of decision making.

Level 5 analysis using spreadsheets is cumbersome and not scalable. At this point, optimization software is an important, even imperative, tool.

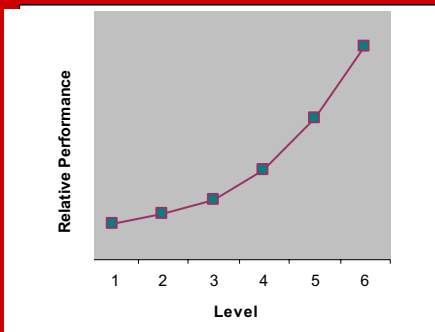
How do I know if my company is at Level 5?

At Level 5, management:

- Understands simultaneous optimization across multiple constraints, at least at the planning level.
- Can focus on marginal economics and the concept of opportunity cost.
- Understands thoroughly the relationships between pricing, sourcing, mix and capital management.
- Has a deeper understanding of enterprise-level resource allocation.

If I'm at Level 5, why should I move to Level 6 knowledge?

Level 6 adds the dimension of multiple time periods. Level 6 enables management to vary inventory levels to adjust to changes in demand, supply and operating inter-relationships. Management knows when and at what stage in the process to build inventories to optimize profits, and how to deploy periodic slack resources to squeeze out every ounce of capacity without expending additional capital.



Level 6 Optimization Across Time

What does Level 6 Knowledge entail?

At Level 6, the business can simultaneously optimize across multiple inputs, costs, recipes, constraints, outputs, and **time periods**. Management understands when to increase or decrease inventory levels and utilize periodic slack resources to deal with various relationships and constraints in the manufacturing process. This applies to inventories at all points in the process, not just finished inventory.

At this point, the manufacturing process is operating as efficiently as possible given its inherent constraints. Decisions can be made quickly and turned into actions that maximize Return on Assets.

How do I know if my company is at Level 6?

At Level 6, management:

- Has a well-developed sense of optimization across time periods.
- Builds and decreases inventories across time to achieve optimization.
- Uses a sophisticated approach to scheduling and sequencing.

If I'm at Level 6, what's next?

Once management understands the profit improvement opportunities generated by Level 6 financial knowledge, they are typically interested in expanding the approach to include business units or the complete enterprise. Increased profits can be "found" at all levels.



For
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