The Hidden Cost Guide

Business Performance and Efficiency
Introduction
How much money are people and corporations losing while waiting, duplicating efforts and not lowering efficiency?

Time is money...

We’ve all seen the e-mail that comically details the staggering amounts of money Bill Gates “earns” while waiting for an elevator or boiling an egg. (By the way, he makes $10 million for the egg.)

These types of comparisons make us think of the relationship between time, business success and money.

Business success is based largely on speed and growth. Time to market, decision-making and productivity are all related to speed.

You can’t afford to wait for products and you can’t afford to wait for information.

Whether that inefficiency is due to a slow computer response, increasing costs to get things done quickly or a misplaced order, it’s costing money right now.

The purpose of this guide is to 1) uncover and illustrate how minor or insignificant delays or inefficiencies that occur in our day-to-day business lives can have disastrous effects when added up; and 2) offer some simple steps that can be taken to avoid these costly mistakes.
Helping Your Business Convert Fixed Costs into Additional Profit

Businesses need to constantly improve their processes, grow and maintain their competitive advantage.

Quality of product, time to market, customer service, tangible capital efficiency, expansion and increased productivity are not just buzzwords, they’re a requirement for any business to survive. Lack of focus on core competencies and profit leaks can bring down an otherwise healthy organization with a viable product.

It's relatively common to focus on variable costs (advertising, R&D, training) to "trim" business expenditures, while “fixed” costs are usually untouched because they are considered “cost of doing business.”

What is not commonly known, however, is that fixed costs can be drastically reduced or increased by minor day-to-day actions, events, and procedures and purchasing decisions.
Until a company can truly control technology adoption, the consumer ends up having the technology control them, not vice-versa.

— The Gartner Group

The IT challenge:
Make the fixed cost of technology into a profitable business tool

In this era of rapidly advancing technology, IT professionals are in charge of implementing the networks and applications that will help a company gain competitive advantages.

The “dot.com” craze of recent years has shown that making the right choice in a myriad of new technologies and applications can make or break a company.

When making IT decisions, CIO’s must think in terms of increased productivity, business efficiency and return on investment, in addition to the technical implications. Companies do not install new technology because it’s “cool.” They are doing it to gain competitive advantages, accelerate growth and ultimately, service the customer more efficiently.

Ironically, as much as computer and networking technology have helped to increase productivity and revenue, it also brings with it a whole new list of issues to be resolved: obsolescence, compatibility with other systems, user training, network outages and “slowdowns.” The list can go on, but the point is that every technology comes with a new set of adoption and business issues.
Companies that manage the total cost of selecting and sourcing products are more profitable.

The Supply Challenge: Support Business Growth
Reduce transactions, costs of goods and services.

The global economy means that organizations have a wealth of information about products and services available to them from suppliers worldwide, and that expansion is a necessity to maintain profitability.

These days, it’s easy to determine the lowest price but difficult to estimate the most efficient way to select and source the products and services at the best cost.

Supply chain management is more than just a buzzword. In fact, it’s the aggregation of product and process in a network of facilities and distribution options for procurement of materials, transformation of these materials into intermediate and finished products and the distribution of these finished products to customers.

Supply chain management is also critical in the expansion needs of the business and can affect the profitability and even the ability of growth.

The process of sourcing can cost more than the product itself
One must balance the two.
Computer networks are key to the supply chain because supply chain improvements substitute information for inventory. As information is considerably cheaper than inventory, there are important gains to be made.

The network becomes more valuable as we rely on information for growth, increase efficiency and reduce costs.

Uncovering Inefficiencies in Your Supply Chain and Your Corporate Network.

In this guide, we will focus on Supply Chain and Data Communications infrastructure; the two areas that are often associated with fixed costs, have a direct impact on your business’ bottom line and are affected by hidden inefficiencies.

Anixter, the world’s largest distributor of network infrastructure products, has developed The Hidden Cost Guide: Business Performance Efficiency to help corporate professionals identify and avoid the hidden costs associated with deficient network performance and non-effective use of internal operations.

It represents knowledge gathered through years of experience in global distribution and logistics as well as working with the world’s leading cabling infrastructure manufacturers. This guide also recognizes field and lab testing on the latest technologies available.
Supply Costs
Hidden Costs:
The Unknown Expenditures

Whether it’s products, services or even internal processes, actual expenditures aren’t often readily apparent and many times they are simply unknown. They are hidden costs that aren’t considered in the product selection and purchasing decision.

Time-to-market, procurement, shipping, inventory, lost working capital and the costs associated with making the wrong choice—these all impact the bottom line and need to be considered when making purchasing decisions.

This guide reveals hidden costs that are unknown or often overlooked, and offers concrete suggestions that will save your company time and money.

To illustrate the impact of hidden costs on a Company’s profitability and productivity, we will look at the effects of each one of these costs on a fictional company’s (XYZ Inc.) bottom line.

- XYZ Inc. produces widgets that require components from different manufacturers.
- Their annual sales are $10,000,000.
- They employ 200 people with an average salary of $10 per hour ($20,000 annually).
- Their annual earnings are $1,000,000.
- There are plans to expand their operations nationwide.
Supply chain: the material information and financial flows that get a product from suppliers to manufacturers, to distributors and to consumers.

“The Trillions of dollars are lost annually to supply chain ineffectiveness.”
— Paul Albright, Commerce Inc.

The Cost of Getting What You Need, When You Need it...

Business processes need products and services to be delivered on time to be effective.

When the product arrives before it's needed internally and before it arrives to customers, there are costs associated with storing, tracking, safekeeping and paying for it.

When a product or service is delayed, costs add up because of the following:

• Charges for expediting an order
• Overnight delivery surcharges
• Schedule delays
• Labor downtime

Product selection is done by different departments and then submitted to Purchasing for procurement.

XYZ Inc. does not track the cost of supply chain. Their two Purchasing agents are measured solely on the amount of discount they get from suppliers for a product or service.

If XYZ managed their supply chain as a profit center, they would see some interesting results...
Supply Costs

It's more cost-efficient to place one purchase order and pay freight for one shipment of $5,000 than five POs for $1,000 each.

*Companies spend more than 20% of the production cost in the supply chain.* — World Bank

Purchase Order and Total Order Cost...

Purchase orders (POs), inbound transportation expenses and other direct procurement expenses add to the cost of the product.

Some of the steps that add “hidden” expenses are:

- Selecting a product
- Creating and transmitting RFQs and POs
- Expediting
- Product and freight payable processing
- Potential errors, returns and claims

By consolidating suppliers and product sources, companies facilitate management, reduce costs and improve productivity.
XYZ buys components from five different suppliers because they save five percent.

Some of their sources are out-of-state, and every order placed is based on the lowest bid.

The table below shows their total cost and compares it to placing the order from one local supplier, who provides a single point of contact and understands XYZ’s needs.

<table>
<thead>
<tr>
<th>PROCESS COST</th>
<th>Multiple Suppliers</th>
<th>Single Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Price</td>
<td>$4,750</td>
<td>$5,000</td>
</tr>
<tr>
<td>Value per P.O.</td>
<td>$950</td>
<td>$5,000</td>
</tr>
<tr>
<td>Freight per P.O.</td>
<td>$30</td>
<td>$100</td>
</tr>
<tr>
<td>Cost to process each P.O.</td>
<td>$125</td>
<td>$125</td>
</tr>
<tr>
<td>Total cost per P.O.</td>
<td>$1,105</td>
<td>$5,225</td>
</tr>
<tr>
<td>Number of P.O.s.</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Total Acquisition Cost</td>
<td>$5,525</td>
<td>$5,225</td>
</tr>
<tr>
<td>Hidden Process Cost</td>
<td>$775</td>
<td>$225</td>
</tr>
</tbody>
</table>
The average company spends between $100 and $150 for processing each order; the average invoice amounts to $50.

— A. D. Little

The PO process...
The average mid-sized company (i.e. $0.5 to $1 billion) can trim 2 million in procurement costs by automating the process. — Internet Week

XYZ tracks their orders over the phone and it takes an average of five minutes per order. If their suppliers offered an efficient way to check order status information on-line, their time and cost is decreased.

### PROCESSING TIME IN MINUTES

<table>
<thead>
<tr>
<th></th>
<th>Phone</th>
<th>On-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone Tracking</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Electronic Tracking</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Receiving to System</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Checking Invoice for Accuracy</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Creating a Check</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total Processing Time Per PO</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Processing Time</td>
<td>50</td>
<td>7</td>
</tr>
</tbody>
</table>

**Employee Time Cost**

($0.17 per minute or $10.00/hr.)

<table>
<thead>
<tr>
<th></th>
<th>Phone</th>
<th>On-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$8.33</td>
<td>$1.17</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>$7.17</td>
</tr>
</tbody>
</table>

These hidden costs are expended each time a PO is placed.

XYZ places 1,000 orders per year, reducing this number to 200 would save them $7,170 in order-tracking time.
Receiving a complete bill of materials, exactly when you need it is more efficient and cost-effective than receiving many partial shipments (even if the individual cost is less expensive.)

The Cost of Partial Order Delivery

Receiving products from many sources increase costs dramatically. This is because transportation costs are based on things like mode of delivery (railroad, truck, air, etc.), distance traveled and the size and weight of packages. When orders are shipped over longer distances in separate smaller packages, the costs are increased dramatically.

Furthermore, product availability varies from place to place, so a product that's easily obtained in the North might need to be special-ordered in the South.
The cost of possession can be as high as 29 percent of the total value of your inventory.

Cost of Possession

Keeping inventory has many hidden costs. Inventory turns, excess and obsolete products impact your working capital efficiency.

Additionally, logistics-related freight and storage costs, return logistics costs (i.e., those associated with unused product returns) and even asset ownership taxes add up.

<table>
<thead>
<tr>
<th>Cost of Inventory (three turns per year)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing and expediting</td>
<td>3%</td>
</tr>
<tr>
<td>Cost of money (4 mos., 1% per mo.)</td>
<td>4%</td>
</tr>
<tr>
<td>Facilities, utilities and taxes (4 mos., 1.5% per mo.)</td>
<td>6%</td>
</tr>
<tr>
<td>Freight (in and out)</td>
<td>3%</td>
</tr>
<tr>
<td>Administrative labor</td>
<td>2%</td>
</tr>
<tr>
<td>Warehouse labor</td>
<td>2%</td>
</tr>
<tr>
<td>Accounting, supervision overhead (1% per mo., 4 mos.)</td>
<td>4%</td>
</tr>
<tr>
<td>Computer and communications</td>
<td>2%</td>
</tr>
<tr>
<td>Obsolescence and scrap</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29%</strong></td>
</tr>
</tbody>
</table>

Costs based on: rent, 5.00 per sq. foot; admin., 28,886 per year; warehouse, 23,636 per year
Supply Costs

Paying for inventory and warehousing before you need it ties up cash and resources and slows growth.

Not having the material on time can cost you business.

Case Study

XYZ keeps $1,000,000 of inventory on hand to avoid project delays and get better discounts. This represents five inventory turns per year at a cost of $300,000 (30 percent of inventory).

If they reduce their inventory to $350,000 (by maintaining volume purchases but managing delivery), their cost would be $105,000.

That reduces their hidden costs by $195,000 per year.

Inventory cost savings are realized by fewer personnel, less warehouse space and inventory administration costs (cost of money, obsolescence and scrap etc).
Beyond Inventories: Capital Efficiency

The math...

- Tangible capital is the sum of inventories and accounts receivable, minus accounts payable:
  \[ TC = Inv + AR - AP \]

- Return on tangible capital is the result of dividing the earnings over the tangible capital.
  \[ ROTC = \frac{Earnings}{TC} \]

When money is tied up in inventory, there is more tangible capital and less return on this investment.

The amount of money sunk in materials and tied up in inventory reduces your ability to invest in other revenue-generating ventures.

MRO (maintenance, repair and operations) inventories may be expended at the time of purchase, but held in inventory for later use. Because these inventories are not “visible,” they often represent a significant investment that is inadequately managed.
Do more with less...

XYZ can increase its return on tangible capital by reducing inventories the following ways:

\[
TC = Inv + AR - AP
\]

and

\[
RTOC = \frac{Earnings}{TC}
\]

**RETURN ON TANGIBLE CAPITAL**

<table>
<thead>
<tr>
<th>Current Inventory Level</th>
<th>Reduced to $350K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inv (inventory)</td>
<td>$1,000,000</td>
</tr>
<tr>
<td></td>
<td>$50,000</td>
</tr>
<tr>
<td>AR (accounts receivable)</td>
<td>$4,250,000</td>
</tr>
<tr>
<td></td>
<td>$4,250,000</td>
</tr>
<tr>
<td>AP (accounts payable)</td>
<td>$250,000</td>
</tr>
<tr>
<td></td>
<td>$250,000</td>
</tr>
<tr>
<td>TC (tangible capital)</td>
<td>$5,000,000</td>
</tr>
<tr>
<td></td>
<td>$4,350,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ROTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
</tr>
<tr>
<td>23%</td>
</tr>
</tbody>
</table>
Complex supply chain networks have many suppliers, product structures, decentralized control and increased pressure for customer service and asset utilization from Wall Street.

For the average Fortune 1,000 company, a 5 percent decrease in supply chain management cost can increase profits by $20 million and market value by $405 million. — FinListics Solutions

The Cost of Inefficiency in the Supply Chain Management

Businesses seek to maximize profits and shareholder value by increasing revenue and/or lowering costs.

In order to cut costs, many businesses spend time and resources seeking the lowest price for a product.

Costs associated with the “supply chain management” process are often overlooked.
Best-in-class companies (defined as the top 20 percent in efficiency) spent only 5.8 percent of their expenses on their supply chains, compared to the average 12.2 percent. This meant an additional 6.4 percent of revenue (which increases working capital) fell straight to their bottom line.

— The Performance Measurement Group

The Supply Chain Affects Your Bottom Line

When a company is involved in purchasing products from different suppliers to support growth and a variety of business processes, it must manage the supply chain as a whole, and not just as a purchasing function.

Case Study

XYZ can improve their bottom line by eliminating hidden costs in their supply chain.

<table>
<thead>
<tr>
<th>HIDDEN COST SAVINGS</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Savings</td>
<td>(250,000)</td>
<td>0</td>
</tr>
<tr>
<td>Process Cost</td>
<td>775,000</td>
<td>225,000</td>
</tr>
<tr>
<td>Tracking Cost</td>
<td>8,830</td>
<td>1,170</td>
</tr>
<tr>
<td>Inventory Cost</td>
<td>300,000</td>
<td>105,000</td>
</tr>
<tr>
<td>Hidden Cost</td>
<td>833,830</td>
<td>331,170</td>
</tr>
<tr>
<td>Total Savings</td>
<td></td>
<td>502,660</td>
</tr>
<tr>
<td>Tangible Capital</td>
<td>5,000,000</td>
<td>4,350,000</td>
</tr>
</tbody>
</table>
Choosing the Wrong Product:
The Ultimate Cost in the Supply Chain.

“It is unwise to pay too much, but it is worse to pay too little; you sometimes lose everything because the thing you bought was incapable of doing the things it was bought to do.”

“The common law of business balance prohibits paying a little and getting a lot on a consistent basis; it can’t be done. If you deal with the lowest bidder, it is well to add something for the additional risk you run for things going bad. And if you do that, you will have enough to pay for something better in the first place.”

John Ruskin (1819-1900)
Writer and lecturer on social and political economy.