

OPERATING GAINS FROM FACILITY PLANNING

Derrick Van Mell (September 1, 2001)

SUMMARY

Many businesses suspect their facilities limit customer relations, crimp productivity, and embed high fixed costs. However, they often don't know how to analyze these serious problems.

This simple spreadsheet shows how incremental changes (for a \$50,000,000 business) driven by better facilities add up to a big improvement. *This article uses case studies to prove the huge financial benefits of having the right building in the right place.*

Income Statement	(\$000s)	Increment	Key reason for increment
Revenue	\$50,000	1% *\$150	Better access, tours, morale
Cost of Goods Sold			*Benefit less Cost of Goods
Direct Payroll	15,000	2% 300	Better labor pool position
Raw Materials	12,000	2% 240	Better buying sphere
Shipping	8,000	2% 160	Consolidated routes
Fixed Expenses			
Indirect Payroll	5,000	2% 100	Easier supervision (2 FTEs)
Facilities	2,000	5% 100	Better space use
Total Benefit		\$950	Profit increases 1.9%
Present Value (10 years, 10%)		\$5,795,000	Added company value

Balance Sheet Effects

Improvements to the income statement mean higher retained earnings and asset strength. A solid facility plan also strengthens loan negotiations to produce less debt or more flexible debt. Creative facility financing, such as sale/leasebacks with repurchase options, can also create capital flexibility. Facilities planning can also support exit planning: you can better face the future by planning how title and leases should flow from one generation of management to another.

Other Benefits to Facility Planning

In addition to financial gain, CEOs should be aware of other benefits to facility planning. We deal with each of them briefly in the second half of the article:

- Leadership
- Time Savings
- Risk Control
- Strategic Planning

Why This Seems Like a New Idea

Strategic facility planning is an overlooked management science. At Harvard, you can take a course called "The New Private Sector: Managing Privatization, Regulation and Deregulation," but there's no course anywhere about where to put your plant, store or office, how to make it work, and how to pay for it. As a result, the real estate community is often asked to provide objective management

consulting advice, yet get paid with commissions or fees based on the size and speed of the deals.

PROOF

Our cases are organized like our income statement:

- Revenue
- Cost of Goods Sold: Direct Payroll
- Cost of Goods Sold: Raw Materials
- Cost of Goods Sold: Shipping
- Fixed Expenses: Indirect Payroll
- Fixed Expenses: Facilities

Revenue Case Studies

Food Distributor The layout, quality and appearance of this firm's new facility led its largest supplier to offer to hand off of its own distribution lines. This boon *tripled* the food distributor's sales.

Credit Union A credit union thought to locate within a business park, but a location analysis (using a new Geographic Information System) made plain that a more costly retail site was essential. Deposits in the new branch in its first two weeks exceeded all the deposits in the credit union's five other branches.

Veterinary Hospital These business owners knew they needed a thorough renovation, but worried that the disruption would be fatal. To their surprise, revenue *increased 20%* during the renovation—when fewer exam rooms were available. Their clients' curiosity about the project drew them to learn about their services and they saw the renovation as a commitment to quality service.

Cost of Goods Sold Case Studies

Direct Payroll: Biotech Researcher This firm considered two locations for its new facility: one near their current location (a university research park) and another in a remote office park. This firm was leaning toward the office park because its lot was \$250,000 less. But when they stepped back, they realized their \$30 million payroll would be at least 1% less if they stayed in the current neighborhood—where staff already lived and which had better amenities and image. That \$300,000 annual savings trumped the one-time \$250,000 land price difference.

Transportation Costs: Home Products Distributor A \$50 million home products distributor had eight facilities in the Midwest. Like many businesses, they

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had added facilities without a plan, but through acquisitions or as a reaction to a competitor. After analyzing all costs within their network, they saw they could close three facilities, yet pay no more for shipping. That consolidation drew down inventory and increased orders filled per person per hour. Profit improved by 100 basis points.

Transportation Costs: Hospital A hospital with twenty-eight facilities had no clear approach to managing the movement of people, records, and equipment among its facilities. For example, a large truck was used for mail daily to a clinic ninety miles away. A simple review showed that consolidation would reduce annual transport costs by \$200,000.

Raw Materials: Food Processor Re-examining one's raw materials buying sphere can yield big results. This firm mapped all current and potential suppliers and researched from where their largest competitor purchased goods: they then hosted wider competition for its business and raw materials costs dropped 2%.

Information Systems Leverage A HMO invested in electronic medical records to reduce staff needs and to improve workflow. They then saw they could consolidate space for storage at the nurse's stations, in claims processing, etc. These facility gains, in turn, further improved staff communications and services.

Fixed Expenses Case Studies

Corporate Payroll The \$50 million home products mentioned earlier saw, after consolidating facilities, that it could then scale back its headquarters staff. So, they reduced overhead, simplified their organization, and saved headquarters space.

Facilities improvements (and problems) have subtle, but extensive ripple effects.

Facility Expense: Telephone company A telephone company had its headquarters functions scattered over five sites, but assumed the costs of a new, single building would be daunting. By digging into staffing and infrastructure redundancies, they saw that eliminating receptionists, maintenance, and clerical staff would offset the added costs of a new headquarters. Further, they saved thousands of square feet of redundant entries, waiting and break rooms, etc.

Assigning a senior manager to these issues (facilities staff usually do not have the operational perspective) can produce a real competitive edge.

OTHER BENEFITS

Facilities decisions are difficult to make and must be based on a solid plan and financial advantage. That said, there are other benefits to strategic facility planning.

Acts of Leadership

Facility decisions are acts of leadership: they demonstrate your vision and commitment to the future, staff and quality. One CEO noted after they moved to a new building that many staff bought new cars, which he took as a sign that morale had jumped.

Time Savings

Good planning prevents errors and saves the time to correct them. A good planning method makes facility planning an efficient, positive team exercise, not a costly managerial distraction. With a thoughtful approach, CEOs can reduce the time they spend on facilities decisions by hundreds of hours.

Risk Control

Good planning controls risk. A 10% overrun, a 10% delay, or a 10% error in projecting space needs are costly. Compounding these mistakes can be fatal. Facilities decisions are unavoidably long-term and complex; they must be faced squarely.

Strategic Planning Benefit

Studying your floor plan is a good way to revisit critical work processes and, as our cases have shown, studying maps of your market place, labor pool, and shipping network lead to ideas about customer relations, recruitment and retention, purchasing, and logistics.

Winston Churchill said, "We shape our buildings; thereafter, they shape us." Studying your buildings is a valuable, practical perspective on the future.

Closing Thought

Buildings are complex pieces of equipment. They have to be placed correctly, designed wisely, financed prudently—and then put to use. They won't produce value without a skilled operator, but strategic facility planning will allow managers from every department make large and lasting gains.