Agile Enterprise and Agile Production

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The Duracell Bunny may run out of juice someday, but the Agile enterprise will just keep on truckin' no matter what. Not because it has a bigger battery (deeper pockets), but because it is adaptable enough to transform itself proficiently into whatever the times require. At least, with the unpredictable and increased pace of change driving business out of business today, that is the salvation hoped-for by corporate management. They understand that business is not just about making money, it is also about staying in business. We used to think that making money was all it took to stay in business. Now we know that you can make money right up to the day you become irrelevant - then you'll probably be the last to know and be ignored to death.

A corporation stays alive because customers continue to pay more for goods than the "real" cost of production. This excess payment is required to cover the cost of production inefficiencies (nothing is perfect), and the cost of preparing for new goods to replace ones that lose favor. With increased global competition it is getting harder to fund these production inefficiencies: someone is always finding a better way to produce the same thing. With faster technological obsolescence it is getting harder to fund the preparation for new goods: reduced product life generates both less investment cash and a higher risk of investing in the wrong thing.

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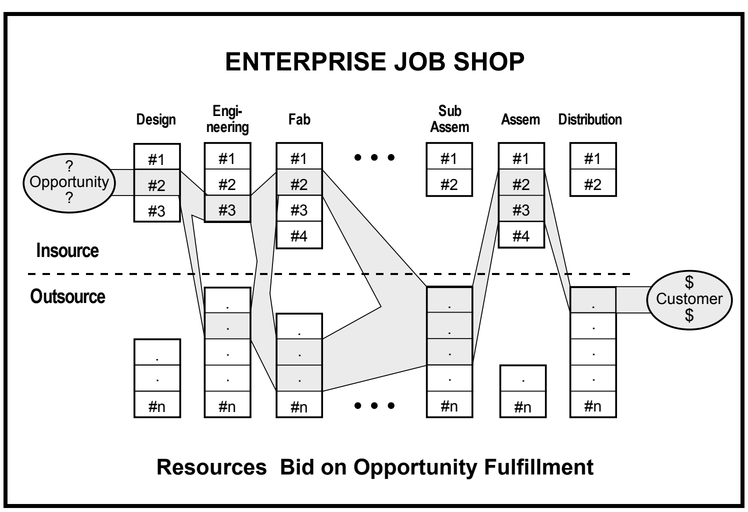
The profit making predictability of any company that wants to outlive its currently successful product family becomes more important and more difficult than ever. The marketplace grows less tolerant of mistakes and inefficiencies, and deep pockets are getting shallower. Borrowing from one successful area of a business to cover problems in another increases the threat to all.

Resources that were correct for customer satisfaction only yesterday may no longer be relevant today. With the increased risk to the entire business comes sharpened recognition that every internal resource must either be making profits today or insuring profits tomorrow.

The board room knows this, and business reengineering is proceeding accordingly. Though many companies may appear to be slow on the uptake, take a closer look. Most are "leaning" out while simultaneously testing and implementing more responsive operating modes. Downsizing has been the dominant strategy employed by companies seeking leaner operating modes, and outsourcing is quick becoming a strategy for increasing responsiveness.

The downsizing process attempts to realign the corporate managerial, professional and labor profile to harsh and changing market realities.



Resources Bid on Opportunity Fulfillment

Nobody likes the process, but cost and skill mismatches threaten the viability of the entire corporation. When business picks up or new products enjoy high demand, these downsized corporations are not upsizing as they once would - instead they are seeking alternative ways to gain the necessary skills and capability without the inertia of captive resources. Consulting organizations are growing to fill the gap for managerial and professional help, contract manufacturing is providing new options for fluctuating production capacity, and outsourcing in general is broadening the capabilities and capacities available to a company on quick notice.

Successfully living with fickle markets and unpredictable technological change requires a higher frequency and freedom of resource reconfiguration than in the past. Looking at it from the corporate view, gaining new productive capacity as well as new productive capability through outsourcing has several potential advantages: short term requirements are not burdened with long term costs, capital investment and its associated risk are both eliminated, the learning curve to develop new production competency is eliminated, and unit costs may well be lower.

Contract manufacturers and outsource firms are thriving. At least the good ones are. They are focusing on areas where they have a high degree of competency, innovating in these areas to maintain leadership, organizing common-process production facilities applicable to a variety of manufacturing customers, and loosely coupling the elements of production so they can be reconfigured to meet demand fluctuations among their customers. Many reach advantageous scale economies by aggregating similar needs of multiple customers; and in any event spread their risk over a broader base of market servers. Kelsey-Hayes (this column Oct '95) is a prime example of all these points.

On the other hand, internal production operations in large corporations carry baggage filled by many captive years, generally lack the authority to invest in the future, and typically subsidize less effective sister operations. What's a plant manager to do? More on this later.

At the corporate level, with or without a conscious corporate strategy, most companies are moving toward Agility, some faster than others. They have no choice. Too much inertia impedes the ability to capitalize on market opportunities, and short changes the ability to bring innovation to fruition. The continued survival of any corporation demands a more Agile operating capability, and most corporate strategies are following a path in this direction.

There are, however, many paths. We have previously looked at the paths that build Agile production from Agile machines and Agile cells. Here we look at a path that builds Agile enterprise from Agile production; and we look from the corporate view where there are alternatives, if there is a will.

We will take a broad view here of production and include all the functions that satisfy a customer opportunity. To put the outsourcing alternative in perspective here, new product design and engineering is the latest wrinkle.

Solectron is a world-wide, billon-dollar-plus, multi-plant, Baldrige-wining contract manufacturer of electronic boards that gets involved with serious engineering responsibility with increasing frequency. The Industrial Designers Society of America and Business Week recently did a survey that showed budgets up but staffing down, time-to-market shortened, and decentralization in: design is moving away from headquarters to the business units and to outside sources.

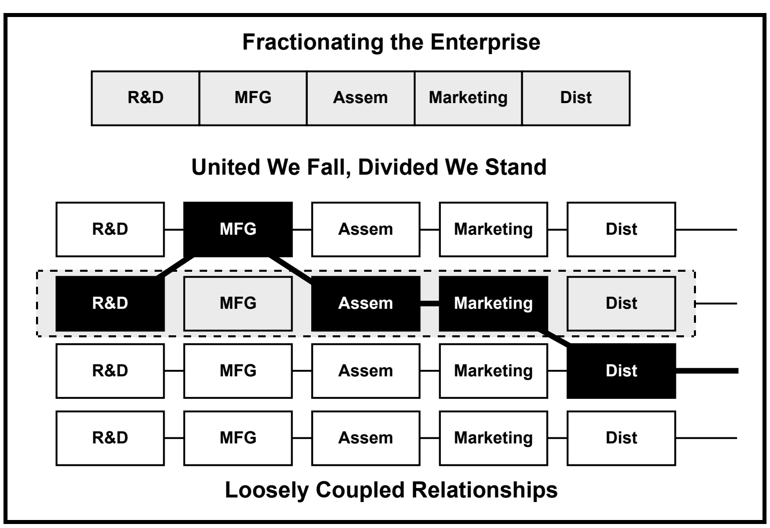
From the enterprise point of view, Agile production is achieved when the makeup and relationships of the enterprise's production resources are easily adapted to the precise needs of the moment, and a fleeting moment it is.

The internal strategy breaks the company into independent functional resource units that look like one big job shop - where units bid on work based on their performance capabilities. Good performance is awarded with lots of jobs, bad performance is starved to death, and the "system" is self-organizing. Some units learn and improve, others get traded out, shut down, or simply ignored to death. Subsidies are replaced with local profit responsibility and investment authority.

Nucor Steel has decentralized decision making so much that plant managers find their own raw materials, find their own customers, and set their own production quotas. Business Week reports that one Nucor plant general manager turned down the presidency of another steel company because it would be a return to "taking orders". Sure, there are efficiencies to be gained with centralized purchasing . . . and a crushing price to pay in overall corporate health. These are not lonely ideas, an irrefutable success base abounds. Nor are they a swing of the centralize-decentralize cycle seen in older corporations with history.

The external strategy recognizes that production resources do not necessarily have to be owned and captive, they only have to perform effectively when needed. Outsourcing and contract manufacturing enters the corporate mix of possibilities here. When a good system is set up these outside alternatives are not used as threats to distort internal costing, but rather as a self-organizing influence that brings best-in-class to the table. If management values the retention of captive resources it must build a system that levels the real difference over a reasonable time. Invariably this leads back to local responsibility and local authority. Internal units that must compete with best-in-class external alternatives must be allowed to compete on an even basis. And by the same token, they must be able to find other customers that will help maintain a balanced production rate, justify new capability investment, and inspire innovative leadership.

From the corporate point of view these liberated internal resources are incomparably stronger assets than they were as exclusive captives. Stronger as profit generators for the corporate coffers, and stronger as reliable best-in-class suppliers. A good system might institute a most-favored-nation relationship with some group profit sharing plans as the ties that bind. Large partner-based organizations like Andersen Consulting offer interesting models here



So what's a plant manager to do? Stuck in a corporate environment where the Agility decisions are being made at the higher levels a plant manager, with hands tied, is liable to (is likely to) see the outsourcing alternatives favored. Think about it - we all know it's cheaper to get it ready-made elsewhere then re-tailor the resources we have. We must: observation says this is human nature, even among plant managers.

So a plant manager could go take a job with one of these outsourcing firms that has all the advantages. Some have. Some keep marching with their heads down figuring they'll retire before the inevitable happens. A few might see the inherent advantage that an internal resource has with the corporation if it is an irresistible member of the family.

People get downsized, plants get outsourced. But nobody outsources a plant that can respond to the changing corporate needs; just as nobody downsizes the employee that keeps one step ahead of the employer's needs.

Viable business entities are those that can keep up with the mercurial markets that are only going to get more slippery. The Agile enterprise is an imperative. And it will happen with or without captive Agile plants. But those that have Agile plants will have a more robust and broader scope foundation.

You can build an Agile system out of rigid in-Agile modules by considering those modules expendable. Thus, you can have an Agile enterprise composed at any one time of in-Agile production facilities, wholly un-owned and virtual, and replaceable at whim and will. But when the enterprise includes captured and enduring business units, the Agility of each captured unit becomes important to the Agility of the total enterprise. If they are rigid rather than Agile, they become defining anchors. They must either be Agile enough to transform as needed when needed, or they too must be replaced. And replacing an owned unit, unlike an outsourced unit, is a change transformation that extracts a toll.

When Agile design principles are employed, replacement of a rigid module is more expensive than transformation of an Agile module. Thus, it costs more to fire and hire than it does to retrain (an Agile person). Of course, if you are dealing with a contract employee (one you don’t own and can consider expendable) than you have our other model of an Agile system.

Plant management that waits for the corporate light to go on may see it shine in a different room. As a newscaster friend used to say: "If you don't like the news, go out and make some of your own". Agile production is not dependent on machinery and capital investments - as the corporate alternatives clearly show. Good application of Agile principles with people, organization, and practices can make a decisive difference in the "Response Ability" of any plant before the corporate strategists consider the options.