



The Invisible Job Shop

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Job Shops have been mostly ignored in the management literature. They are invisible. They have not been studied and written about; rather the focus has been on mass production manufacturing. When I first wrote and published the book, *Speed to Market: How to Cut Lead Time and Increase Profits in Job Shops and Custom Manufacturing Environments* in 1998, I could find no material on job shops (Google search) other than a few articles on scheduling. Today, there are 589,000,000 references to “job shop” on Google. Quantity is no guarantee of quality however.

Later, I discovered an article published in the Harvard Business Review in the March-April 1989 issue, *Time to Reform Job Shop Manufacturing*. This is an insightful article on job shops and their special characteristics by authors James E. Ashton and Frank X. Cook, Jr. The theme of this article is that job shops have to shape up. The first paragraph of their article sets the tone:

American industry is beginning to put its manufacturing house in order. Companies building high-volume standardized products like copiers, appliances, and automobiles are learning from their foreign rivals and emulating their commitment to ongoing product and process innovation. But one important segment of U.S. industry—job shop manufacturers—continues to postpone needed reforms. Many of these companies have been sheltered from foreign competition by their products’ custom nature and lack of mass market potential. Without an urgent competitive threat, job shop managers have been slow to overhaul their manufacturing operations—despite problems of mediocre quality, excessive lead times, unreliable delivery, and high costs.

This is no longer the case of course. Jobs shops now compete internationally, in tool and die making, machining, and other industries. Ashton and Jones offer few solutions and a couple of misplaced improvement techniques that are not applicable to job shops.. But on the whole, they understand job shops and how they work which is refreshing to see.

The Formation of the Job Shop Knowledge Store: Nevertheless, solid job shop knowledge remains scarce which is what prompted me to offer my knowledge of these businesses in a series of eBooks based on the concept of **actionable intelligence**.

Definition: *Actionable intelligence is information that can be followed up on, with the further implication that a strategic plan should be undertaken to make positive use of the information gathered. This meaning is distinct from the use of actionable intelligence in a legal context, which means that information meets the legal requirements for a justifiable (actionable) lawsuit.*

Each eBook focuses on a specific area of the job shop business process and will show you

- What needs to be improved;
- Why it needs to be improved;
- And how to go about improving it

Who are you?

I ask this question because not everyone will be a Job Shop Store customer.

1. One type of customer is a person who is always in a learning mode and will naturally be curious enough to explore these eBooks. They know that knowledge is valuable and finding job-shop specific actionable intelligence is a treasure.
2. Another type of customer will be one who knows one area of his organization is not working up to snuff, and needs improvement. An eBook on this subject will provide insights and practical strategies that can be used immediately to address the situation.
3. Another type of customer will be someone who is confused about what to do, and will grasp at anything that even hints of providing help for the situation. Here is my favorite post from a job shop discussion group. A manager who made the transition from a mass production environment to a job shop was totally frustrated by his inability to make changes that would produce bottom-line results. Here are his comments posted on a discussion forum:

I am the VP of Manufacturing for a privately owned machining job shop. After 23 years with Motorola, I thought I could help improve any kind of manufacturing process, but I was wrong. I have had much training in JIT, Six Sigma, TPS, Kanban, Lean, Continuous Improvement, and some Black Belt courses.

I am struggling with making quantifiable improvements that show up on the bottom line. Currently we are a small team of individual players. The organization has been together for 20+ years and the "old" mindset is "Things will never change." I've introduced ideas with the support of the owner only to have them fade after a few days with little impact. I most often get sucked into the daily tasks of the business, thus causing even myself to let ideas drop by the wayside.

I was hired with only one real expectation.... improve the bottom line. I have not really accomplished anything in the past 12 months, and fear my position is short lived if I don't find the "Correct Path" to lead the team down.

Has anyone out there had these problems and pulled through? Please advise, I am open to any suggestions. Best Regards, Tom

Advising Tom: Tom is up against a tough situation. The first is his acceptance by the others in a tight group that has been together for 20+ years. It's possible he may be the first new person they have had to deal with. He will likely have to prove himself.

The bigger problem is Tom's lack knowledge about job shops. He has come from a mass production environment where the tools and techniques he mentions are applicable. However, they are not applicable in job shops. Without his tools, Tom doesn't know what to do since applying them didn't work in the job shop environment. He appears to be a "tool guy" who doesn't understand the importance of learning how a business actually works before trying to improve it.

If I were to advise Tom, it would be for him to focus on cutting lead time. It's common knowledge in job shops that short lead times provide a powerful competitive advantage. This means that Tom's efforts to cut lead time will be understood and supported because it makes sense and is understood.

He would benefit greatly from either of my *Speed to Market* books which will show him how to accomplish this ongoing goal.

4. And finally, the non-customer. The non-customer has no time. The non-customer

has a short attention span and has difficulty reading material that requires thought. The non-customer may be something of a know-it-all. The non-customer is closed to outside influences. The non-customer doesn't listen. The non-customer may be an expert in the technology on the floor, but it is unlikely an expert in management. The non-customer doesn't know the difference between urgent and important. The non-customer rejects others' ideas. The non-customer is disrespectful to salespeople and doesn't understand the value they represent in industry knowledge, as well as new technology. (Try welcoming them with open arms and see how much more value you get.)

There is no "theory of job shops" Not only have job shops been ignored in the literature, they have also been ignored in the manufacturing departments of universities across the country and around the world. Have you ever come across a Job Shop Management 101 course? I haven't.

That is why I created Job Shop 360. This is the only job shop management training program on the planet. Seven learning modules cover the most critical areas of job shop operations, with the 7th module being *A Radical New Paradigm for Job Shops*. This new paradigm is based on the concept of horizontal management. It's managing across the business process and not up and down in functional silos. *Job Shop 360* is both basic and sophisticated at the same time.

The Need to Change your Paradigm: Changing your paradigm becomes more urgent as you see your continuous improvement efforts plateauing. The new way of looking shown in this presentation will enable you to manage your business more logically as the business process, organization design, accountability, and performance metrics are aligned. This will enable you to manage at a higher level of competitive performance

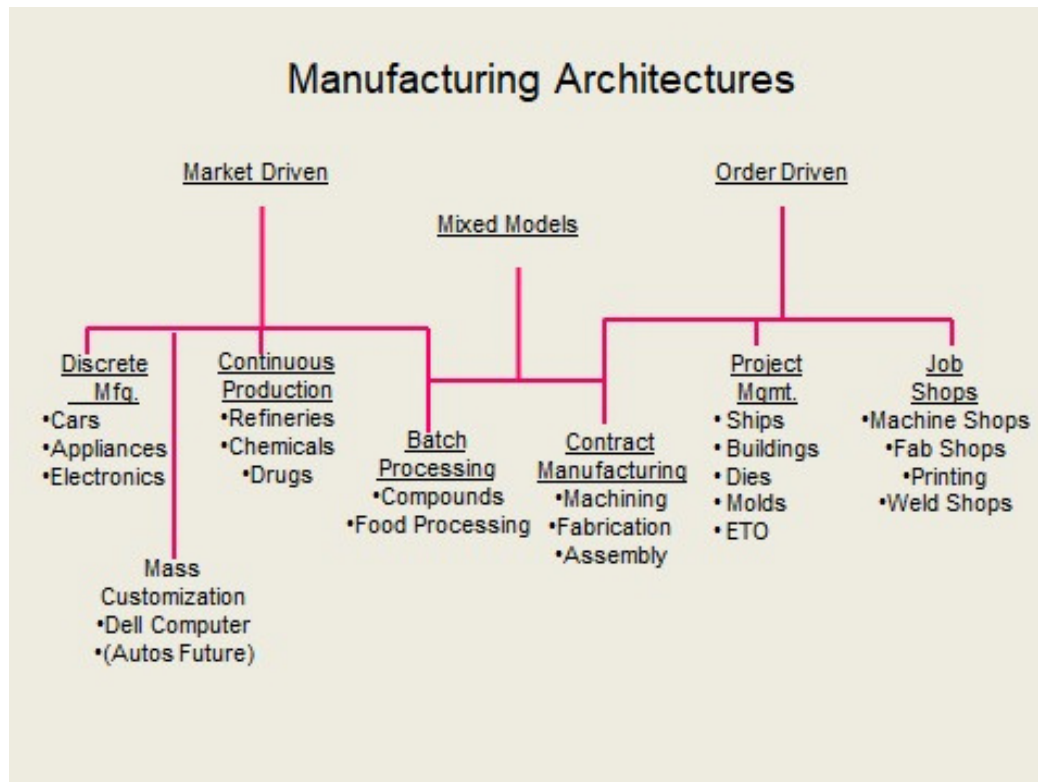
which drives profitability. *A Radical New Paradigm for Job Shops* shows you a problem you don't even know you have, how to see it, and then how to solve it.

The Vacuum: Given this lack of attention to job shops by the academic community, a vacuum was created in the job shop world. That vacuum was filled by concepts and practices “borrowed” from mass production manufacturing that have no place in a job shop. The functional organization structure is one glaring example. Another is the idea that the production schedule should control the shop floor.

Background: I have been studying, writing about, and working directly with job shops in a number of industries for 40+ years. I published two books and several articles on job shop issues and solutions. These eBook are a culmination of that experience.

I first became interested in job shops through a project with the Hyde Manufacturing Company in South Bridge, Massachusetts in 1990. The presenting problem was two different businesses under the same roof (a make-to-order job shop they saw as the “specials department, and a build-to-stock mass production business) which were jumbled together. Management did not recognize a distinction.

By the way, there are more than just job shops and mass production architectures as the following chart illustrates.



Each of these architectures requires a different strategy and approach to drive continuous improvement. This is why the mass application of lean by an army of adherents who only know the tools, techniques, and Japanese words is wrong, and

works to the disadvantage to those where it has been tried unsuccessfully (which I understand to be a big number).

Managing Change: The problem that faces the job shop owner who recognizes the need to make their business more competitive is the need to drive out the old and replace it with the new. This transition is what is meant by “managing change.” So if you own or manage a job shop and want to become more competitive by using the actionable intelligence in these eBooks, where do you begin? Carl Rogers is a clinical psychologist who developed an approach he called Client-Centered Therapy.

Definition: Person-centered therapy, which is also known as client-centered, non-directive, or Rogerian therapy, is an approach to counseling that places much of the responsibility for the treatment process on the client, with the therapist taking a nondirective role.

The same can be said here. Start where you have the greatest concern. It might be that you are frustrated by the lack or delay of timely performance data you need to manage the company. You would benefit greatly from the eBook *How to Design, Implement and Use a Weekly Performance Report with Metrics*. Or, you might be concerned that lead times are too long. There is an eBook for that (#13). Or you might be concerned with not being able to ship on time. There are a number of eBooks pertaining to this subject.

The Knowledge Store eBooks provide actionable intelligence to drive improvement in major areas across the job shop business process. When you click on the chapter title, it shows a description of the eBook so you can make a better informed decision about purchasing it or not.

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16 eBooks; 77 Chapters

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