



Taking dramatic steps to become agile is necessary to be a manufacturing or distribution contender in the next decade. Organizations must focus on moving information and products quickly through the entire supply chain, distribution, assembly, manufacture, and supply. All physical events must be enacted swiftly, accurately, and effectively. The faster that parts, information and decisions flow through an organization, the faster it can respond to customer needs and orders.

Articles on Current Issues:

Business Process Reengineering: The Turbo Organization

Driving a turbo-powered sports car is an exciting experience. Step on the gas pedal zero to sixty in a few seconds. Maneuvering through traffic.... downshift, accelerate past others, upshift....gone. Curves coming up?....downshift...corner..... accelerate. You notice the responsiveness of this finely engineered product. You expect this; this precision machine was designed for this, and it is performing to spec.

Wouldn't it be great if you could do this with your business? That is...quickly respond to market demand by accelerating new product introduction,or quickly change your product mix,... ..or maneuver orders through the organization quickly,...or move parts across the factory floor with velocity,or handling the unforeseen, the "curves,"..or quickly moving decisions through the organization? This is maneuverability and turbo power. This is enterprise agility. It can't be done today because the organization wasn't designed for this. The way we have organized ourselves over decades works against us.

Our current organizational structure is stifling. Functional departments result in colloquial thinking and narrow points of view. Natural and functional conflicts create internal adversarial relationships that prevent sharing of ideas. Classes in the business environment cause an "us and them" syndrome. Politics prevail.

Worse,..operations are physically separated from headquarters, component plants from assembly, assembly from the market. The factory floor is organized by process, creating poor product flow. In the office people are separated by departments and physical walls creating poor communications and information flow. What happens when we step on the gas? The engine floods.

The Grand Prix

Why is all this important? Competing has taken on new proportions. A global resegmentation of markets emerging is changing the world economy. U.S. manufacturers face stiff offshore competition in most markets. Companies failing to respond to the challenge will find themselves left behind in the dust.

The U.S. in Reverse

In 15 years, the U.S. lost significant world market share in key industries: wide-bodied aircraft, semi-conductors, automobiles, and steel. There is almost no production of VCR's, camcorders, tape players and recorders, radios, phonographs, or compact disc players in the U.S. Imports in other industries continue to increase. Industries under intense foreign competition include farm machinery, lawn and garden equipment, machine tools, bicycles, and process controls. Foreign competitors deliver high quality products with one pass through the factory, while U.S. production is consumed in fixing mistakes.

Back to the Drawing Board

Organizations need to be fast and flexible to change with market dynamics. All physical



Winners never give up. Mistakes are learned from, techniques are mastered, skills are honed, weaknesses are strengthened, barriers are overcome, and the athlete becomes a relentless competitor. A vision of crossing the finish line in first place drives the athlete until the sweet smell of success is realized.

and logical events must be enacted swiftly, accurately, and effectively to compete in the next century. The faster that parts, information, and decisions flow through an organization, the faster the response to customer needs. The keys are flow and time.

Every business has basic cycles that govern the way that paper is processed, parts are manufactured, and decisions are made: customer order, product development, production, procurement, etc. Examining the flow of documents within the cycles and the time consumed can be revealing. A customer order cycle begins with the placement of an order. It ends with the payment for goods or services rendered. There are activities in between the two events that consume time. Some add value, such as packing and shipping, and some are nonvalue-adding and delay time, such as moving the order around the building from mailbox to mailbox, or repeating motions.

When a cycle ends, a lot of nonvalue-adding time has been consumed that may constitute 40-50% of total time. Some of the time is lost in travel, some is lost in the processing backlog, and some may be lost diverting it to a credit department for release. If the nonvalue-added time in the cycle can be identified, ways to eliminate the causes can be devised.

An Engine Redesign

Most organizations today are designed to compensate for circumstances that could go wrong, particularly on the shop floor. The causes are found in the way parts are manufactured, with delays, queues, missing parts, pirated parts, bad parts, and part shortages.

Within the factory, velocity can be induced by physically clustering successive operations into cells and reducing operation cycles and set-up times. Deep organizational changes cannot be effective until key problems in factory flow and cycle times are removed

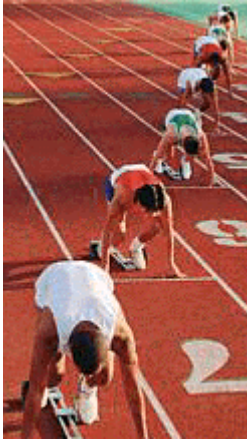
Adding Some Aerodynamics

Fostering innovation, among other things, requires good organization of information. Our current systems and procedures have been developed at length to control an unwieldy information channel. When we get past the stifling paper flow, disparate computer systems, and functional organizational walls, the homogeneity of ideas will begin to generate quickly.

Organizing for ease of sharing information for innovation is a first step. The information chain must be streamlined and electronically linked, so that the flow is direct. Removing useless and redundant data existing on screens and reports from the job stream increases the value of the information provided. Reducing business cycle times to the time it actually takes to efficiently process information supports fast movement of physical parts.

The Turbo Organization

Having the ability to produce spontaneously upon demand requires short lines of communication and velocity throughout the work chain. To reduce business cycle times, fast communications and decisions are required throughout the organization. This means reducing numbers of vertical and horizontal management layers. Physical walls have to come down. Organizing around business cycles, and physically clustering people in cells for fast, effective communications is one way to do it.



A Faster, Lighter Vehicle

Inducing velocity throughout a business has a profound effect on time and cost. The need for nonvalue-adding functions disappears, and the functions designed to accommodate exceptional circumstances fall out. The organization chart becomes flatter. Following this is a dramatic reduction of overhead.

The Winner's Circle

You have to ask yourself what it could do for you if you could respond to a dynamic market with velocity in delivery and new product introduction, and manufacture high quality products at low cost. Chances are, when you're able to do this, you will be in the winner's circle, and the trophy will be the new results on the "bottom line."

Why is this important? Competing is taking on tough, new proportions. A global resegmentation of markets is emerging that is changing the world economy. U.S. manufacturers face stiff offshore competition in most markets. Companies failing to respond to the challenge will find themselves left behind eating someone else's dust.

© 1991 Rockford Consulting Group, Ltd.

All Rights Reserved

Author



Richard G. Ligus is President of Rockford Consulting Group, Ltd., located in Rockford, IL., with over 30 years experience in manufacturing, procurement, transportation and distribution. He specializes in developing and implementing manufacturing, distribution, and supply chain strategies. Rich is an author and a speaker, and has developed seminars with the American Management Association. He is certified by both the Institute of Management Consultants and the National Bureau of Certified Consultants.

Rich has a bachelor of science degree in mechanical engineering from the New Jersey Institute of Technology, and a master of business administration degree from Rutgers University. He is a member of CASA/SME, and has been listed in Jane's Who's Who in Aviation and Aerospace. He has been a speaker at IMTS, USCTI, APFA, NEPMA, MCAA, Hand Tools Institute, CASA/SME, and others. He has appeared several times on WREX-TV, Mid-Morning Magazine.

About Us

Rockford Consulting Group is located in Rockford, IL, a city with a substantial manufacturing and machine tool history. An Illinois corporation, our company specializes in supply chain management, focusing in manufacturing and distribution operations management consulting. As companies search for ways to react to intense competitive pressures, we offer a unique group of integrated, dynamic state-of-the-art services to help clients develop world-class performance capability.



World-class performance requires speed, quality, agility, and endurance. In a highly competitive race for world market domination, there are no silver or bronze medals. You win or you lose. This degree of performance doesn't simply happen. It requires years of commitment, conditioning, and a vision of a gold medal.



We facilitate the development and execution of supply chain, manufacturing, procurement, logistics, information systems, distribution, and organizational strategies that reduce delivery time, reduce cycle times, reduce costs, streamline information flow, streamline the organization structure, reduce manufacturing time, quicken the decision making process, and build a cohesive management team.

Rockford Consulting Group has a cadre of the best consultants in the world today, providing high quality professionalism through the use of experience and innovation. We subscribe to the Institute of Management Consultants Code of Professional Conduct. We provide high-quality professional consulting services that span both technical and cultural issues. Our clients are treated as our highest priority. Everything that we do is client driven and for the client's ultimate benefit

Through our affiliate offices, we serve North America, Central America, South America, Middle East, Southern Africa, and China, with over 1000 specialists worldwide.

Consulting Services

These are the various services and applications we offer, as part of our Supply Chain Management consulting portfolio, for BPR implementation efforts in both manufacturing and distribution:

- Value Stream Mapping
- Increased Productivity
- Inventory Reduction
- Business Cycle Time Reduction
- Order-to-Ship Lead Time Reduction
- Increased Business Cycle Throughput
- Information Technology Strategic Planning
- Technology Analysis
- Operational Audits
- Inventory, Capacity and Cycle Time Reduction Performance Audit
- Business Systems (MRP-II or ERP) Performance Audit
- Sales Planning and Product Forecasting Performance Audit
- Business Process Mapping/Analysis
- Work Flow Analysis/Assessment
- Policy/Procedure Development/Rewrite
- Business Process Reengineering
- Information Systems Effectiveness Analysis
- Functional Needs Assessments
- Software Package Evaluation/Selections
- Systems Hardware Capacity Analysis
- Outsource/In-house Assessments
- Organization Design
- Implementation Support
- Logistics/Distribution Systems Evaluation
- ERP Evaluation
- Cost/Benefit Analysis
- Materials Requirements Planning System Evaluation
- Cycle-time Reduction Consulting
- Project Management

© 2007 Rockford Consulting Group, Ltd.

All Rights Reserved

Rockford Consulting Group, Ltd.

- 7210 East State Street Century Plaza Suite 206 Rockford, IL 61108-2624 •
- Telephone (815) 229-2900 • Toll Free (800) 667-7495 • Telefax: 815-229-2612 •
- E-mail: rligus@RockfordConsulting.com • Internet: <http://RockfordConsulting.com>