



THE MAGAZINE FOR COMPUTER APPLICATIONS

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RESOURCE PAGES



A Guide to online information about:

Starting your Own Business and Supply Chain Approach to Planning and Procurement Management

by Bob Paddock

Are you tired of working 40 hours a week for someone who thinks knocking down cement walls between rooms "will improve communications" among the staff, something right from a <u>Dilbert Cartoon?</u> Any logical engineer knows <u>interruptions</u> are one of the most effective productivity killers around.

Tired of dealing with an IT department that tells you to "live with the 'No Permission' error" on the e-mail system that you are required to use to do your job?

How many hours are you willing to have your logic working for yourself? 80 hours, 100 hours, more? In only 7 simple steps you can have your own e-Business.

Step 1: Get an Email Address Step 5: Improve Your Site Step 2: Build a Web Site

Step 6: Find New Customers

Step 3: Attract Visitors

Step 7: Sell Online

Step 4: Track Your Visitors

Get Started Now!

So now that you have all the answers on how to start your own e-Business, my work for this month's Resource Page is finished, right?

In all seriousness, the Netscape Small Business Page does have many useful items such as:

Owning a Successful Business - Do You Have What It Takes? - Look at what it means to own a business, from sacrifices you'll have to make to skills you'll need to succeed.

> Owner's checklist for starting a new business (rtf file to download)

You should study this site well before taking the plunge.

What might e-commerce look like in the future? Perhaps buzzsaw.com, who is transforming the building industry online, gives us an example of the future.

"Control your costs and your profits will take care of themself." - Andrew Carnegie, creator of the Steel Industry, circa 1860.

As an engineer working for a contract manufacturer, I once had the audacity to question a management policy about minimizing inventory. I wrote a rather lengthy memo questioning the management policy of "buy only what you need when you need it (Just In Time)" in relation to equipment setup times. To add weight to my concerns, I spent some time searching out answers to my questions about inventory stocking and how some big name players, such as HP, do it.

The single one sentence reply I recieved from the company's owner was, "You don't understand cash flow."

I'm the type that tries to seek out answers to things I don't understand. In seeking an answer to learn about cash flow, I found the answer in my own hometown, and most likely, so can you.

The local Chamber of Commerce sponsors a program called "Project Start" a couple of times a year.

"Project Start" was a one night a week class for 12 weeks that gave a introduction to

small business management. They covered *overviews* of accounting, cash flow, inventory management, personnel management, financing, marketing, and, most importantly to us, how to find help to write a "Business Plan".

The point I'm trying to make is that Internet and High Tech are useful, but don't over look old low-tech ways, such as the local phone book. The local people can help you by pointing out any local or regional requirements, such as taxes and licenses that you would be required to have.

Some of main points from my Project Start class:

Everyone wants "Angel Financing." That is, an angel from heaven drops the money you need in to your hands just as you want it. It almost never happens. To get financing, you're going to need a sound Business Plan.

If an item comes in your door, you need to raise its price going out by at least 33% just to stay in business. This is to cover handling, overhead (such as keeping the lights on and keeping the heat going). Nothing at all about profit in there. The amount varies regionally and from industry to industry.

When you go to a financial institution to ask for money for your new business, ask for **at least twice** what you think it is going to take. It is much harder to get a second loan when you've underestimated your need for cash, than it is to get all the cash up front. You <u>will</u> underestimate your need for cash.

It may make more sense to lease equipment—for example your phone system—than to buy it outright, because this allows you to keep more of your cash liquid and available for flow.

The financial institution also wants to know, though they probably will not ask in so many words, how much are you willing to risk. Are you willing to put everything you own up as collateral? They want to know how much it's going to hurt *you*, if you fail. If you are willing to risk nothing, then they will probably risk nothing on your new adventure.

Know where your customers are going to come from. "Build it and they will come" makes nice commercials, not profitable business.

Enough of my monolog. Let's get on to those cool High Tech links, where you can learn about cash flow, supply-chains, and starting up your new business.

Since the big news, and perceived big money, is in Initial Public Offerings (IPO's), the best place to start is with the official rules of the <u>Securities and Exchange</u> Commission.

Introduction:

The Commission administers Federal securities laws that seek to provide protection for investors; to ensure that securities markets are fair and honest; and, when necessary, to provide the means to enforce securities laws through sanctions.

I know of one promising technology that was put to death because the company's stock was not properly registered. So if you have any inkling of someday doing an IPO, make sure you have all your paperwork in proper form.

More links on Securities/Stocks/Finance/IRA's/IPO's can be found here.

Federal Trade Commission

Introduction:

The objective of the Federal Trade Commission is to maintain competitive enterprise as a keystone of the American economic system, and to prevent the free enterprise system from being fettered by monopoly or restraints on trade or corrupted by unfair or deceptive trade practices. The Commission is charged with keeping Competitive both free and fair.

More links on FTC related maters can be found here.

The <u>FTC</u> of late has taken to policing web sites for unsubstantiated claims.

Sometimes when I'm working on these Resource Pages I come across some thing that leaves me to wonder, "Why?" Such as when I came across <u>Funeral Rule</u> (<u>16</u> <u>CFR Part 453.pdf</u>) on the <u>FTC</u> site. If your business is going under, I guess they want to see that it gets a proper burial??? [Actually it deals with the Funeral Industry, an area of business that is growing instead of dying.]

The <u>Internal Revenue Service</u> as an example of other government information that is helpful. If you want to see an example of how NOT to write a document then check out <u>United States Code TITLE 26 - INTERNAL REVENUE CODE</u>.



...Federal Gateway's picks of interesting sites.

NIH-Guide to Grants and Contracts Database provides free e-mail subscription.

<u>Grants Net</u> has a solid introduction to the federal grant business.

U. S. Government and Grant Resources good consolidation of same.

Financial Literacy - Hot Sites Listing of quality financial sites.

CBDNet key publication of federal contract activities with explanations.

Small Business Administration.

Bureau of Labor Statistics.

US Business Advisor.

Federal Gateway to State and Local Government.

State and Local Government on the Net

A Piper Resources guide to government sponsored Internet sites.

<u>Links to Small Business Marketing Resources from</u> Arizona Small Business Resource.

Don't let the name mislead you. The information is valid no matter where you are.

Since I'm located on the Pennsylvania/Ohio border, I've used them more extensively. However, each state has their own resources to help you get started.



"Start A Business" in Pennsylvania Internet Government

This <u>web site</u> is the result of the first phase of the Commonwealth's ongoing effort to make Pennsylvania the best and easiest state to open and operate a business!

By visiting this one web site, an entrepreneur can get state filing information and many of the forms necessary to start a business, along with other helpful documents and links.

Entrepreneur's Guide

Guide Part 1 - 52 Pages Guide Part 2 - 50 Pages

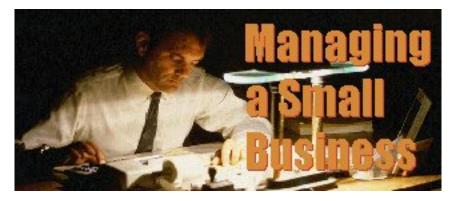
An example of how a state might be able to help you bring in new business:

Pennsylvania gives green light to web collaboration project

Cot 20, 1999 --- Pennsylvania has embarked on an initiative to push Web collaboration among industrial and technology companies in its region. Dubbed "The Lightning Manufacturing Project," the initiative counts Ingersoll-Rand, Lockheed Martin, Cadence Design Systems and IBM among its early backers. The project is the second such advance technology initiative unveiled by the state. In June, Pennsylvania launched the "Digital Greenhouse," an effort to bring next generation system-on-a-chip development to the state. This new initiative applies what's being called a Virtual Corporation Management System (CMS). The system provides an online forum for companies to collaborate as "virtual corporations" for joint bids on manufacturing and design contracts.

To make Pennsylvania the national leader in job growth, <u>Team Pennsylvania</u> serves as a catalyst to retain and create jobs through a partnership of public and private sector leaders by identifying opportunities and applying cutting edge technology to advance its mission.

"I'm from the government and I'm here to help you!"



The Small Business know-how Resource

Advanced Small Business Information Guides, Tips & Ideas To Help You Better Manage Your Business

Are you making any of these 10 Deadly Small Business Mistakes?

The Entrepreneur Test (quiz)

Do you have what it takes to succeed as an entrepreneur?

<u>The Institute of Management and Administration</u> publishes a broad range of high quality information products for business professionals.

Their newsletters and special reports offer "in the trenches" management advice.

Find out everything you need to know to <u>run a successful business</u>. Get advice from Prodigy members who have been there, done that.

You need <u>ManagementLibrary.com</u> to do your job, or to help you do your research. It's filled with thousands of articles on the topic of business management from a practical no-nonsense standpoint in categories like Human Resources, benefits, compensation, corporate finance and accounting, law office management, public accounting, safety and security, and more.

Financing:

The <u>Fisher College of Business</u> has designed a site to assist you in gathering information on a wide variety of financial topics such as <u>Venture Capital</u>.



In the <u>Small Business Resource Center</u>, <u>Master Card</u> has assembled a host of valuable information on the key issues that impact your business. The Center gives you instant access to Master Card's years of business building experience and the solid expertise of business publications and partners.

Don't overlook your closest resource—your Significant Other. For example, my <u>wife</u> subscribes to a newsletter called <u>The Dollar Stretcher</u> that has a lot of tips on doing a Home Business.

Remember that company that started out in a garage?



The Dollar Stretcher, Inc.

The Dollar Stretcher also has links to Bank Rate Subject Index for small business.

Bankrate.com SM, an online publication of Intelligent Life Corp., has a new feature:

Ask the Small Biz Adviser

Every Wednesday <u>Stephen Windlass</u> will answer your questions about starting and running a small business. Check <u>out a past column</u>.

<u>Forbes</u> has several items related to getting your e-Business off the ground, as well as weekly updates on what is happening in the Small e-Business world.

Looking for a new business idea or partner? Go talk to one of your kids. My partner, my father.

Never too small for e-business.

Forbes Small Business Center, an online resource for owners and managers of growing companies.

Business plans for the new e-Conomy., which is continued in Dos and don'ts.

<u>"Content is king"</u> Software to write your own business plan is only as good as you are creative. "The software should be used as a tool rather than a crutch." - Robert E. Calem.

After your new business is off the ground and going well, it is time to start thinking of Pension Options to offer.

- Pension law: an overview.
- Sec. 401k. Qualified pension, profit-sharing, and stock bonus plans.
 United States Code TITLE 26 INTERNAL REVENUE CODE.

As a participating business you get a tax break. You didn't really think your current employer was giving you a 401k out of the goodness of their heart, did you?

Does your current employer have a Byzantine Performance Appraisal System? The type where if you worked 24 hours a day, 365 days a year, the highest yearly raise you can get is 2.8%, while the rate of inflation is 2.6%.

When starting up your new e-Business, you might want to consider other options.

For example in the book:

"Strategic Pay" by Edward E. Lawler III ISBN 1-55542-262-4

Mr. Lawler shows how organizations can use pay systems as a strategic tool for improving organizational effectiveness - rather than simply viewing pay as an unavoidable cost of doing business.

Cynthia L. Sutton Ph.D. of Division of Business & Economics

Indiana University South Bend has written on Pay-for-Performance Programs, and has links to other sites of interest to us on the subject of Business Management.

Keep her advice in mind at all times: "Leadership is the very heart and soul of business management. No one really manages a business by shuffling the numbers or rearranging organizational charts or applying the latest business school formulas. What you manage in business is people."

<u>Watson Wyatt's</u> employer surveys on <u>Strategic Rewards®: Creating Financial</u> <u>Capital Through Human Capital</u> have consistently found that high-performing companies tend to better align their reward plans with their business strategies.

It is important that employees don't see Strategic Pay as an entitlement to "some extent" or to a "great extent". Strategic Pay should be implemented as a reward to motivate desired behaviors.

It is important that all share equitably in any business venture. If the executives are taking home six-digit salaries while the people building the product and interacting with the customers are making minimum wage, you can be sure that in the long term, the people most valuable to the company will seek out greener pastures. They just might go off and start up a new company as your competitor with their inventive

ideas, which could have been adding to your own bottom line.

Any policy you create is bound to have side effects. Make sure you consider the side effects before you implement your new policy, as it might cause problems worse than the one that your new policy was meant to solve.

Supply-Chain:

Have you ever wanted to do business with a company but you only needed a ten-cent part, while they had a hundred-dollar minimum order? Did you ever wonder why they had this policy to impede your progress?

Does your management insist on using a MRP/ERP system that tells you to order a single SMT resistor that cost 0.083 cents every two weeks? What does doing this really cost your company?

Think about the old adage "Time is money." It takes your purchasing department just five minutes of their time, plus the phone charges, to get that resistor on order for "Just-In-Time" delivery. Then it comes in to your receiving dock, where it has to be inspected. Then to your warehouse, where it gets checked in to stock. Then it gets checked out of stock for the job to be built.

A minimum of five people have just spent their time/your money on getting that one 0.083-cent resistor.

Just because things like inventory and inventory turns are easy to measure, does not mean your company is maximizing its profits. Like <u>Andrew Carnegie</u> pointed out more than hundred years ago, it is your costs that need to be controlled, not your inventory. Maybe "you don't understand cash flow," but you do understand cost control.

To measure your staff's productivity is not the same as to improve it; "What you measure wrong, you manage wrong." - Bob Lewis in InfoWorld.

<u>Eric Raymond</u>, a partner in my own supply chain, from <u>Pioneer-Standard</u> told me about their new partnership with <u>Supplystream</u>.

<u>Supplystream</u> has come out with a line of tools that allow you to optimize the total cost of ownership. These tools will let you find out what that ONE 0.083 cent resistor really costs you to "own" it.

For example, AutoK is an application tool to help materials managers create cost effective supply chain strategies. Like other Supplystream Tools, AutoK is designed around the principals of Activity Based Costing and helps the user measure supplier total cost of ownership.

<u>Supplystream</u> tools are particularly useful for measuring the value of services provided by distribution. <u>Supplystream's</u> supply chain management tool suite provides the user with a host of powerful tools to measure and manage supplier value added services.

Their tools can answer questions such as, is a \$1 IC from a vender that adds no

value cheaper to own than the same IC for \$1.10 from a vender that will keep stock for you on their shelf?



<u>The Supply Chain Approach to Planning and Procurement Management</u> by Gregory A. Kruger.

The supply chain approach models stochastic events, influencing a manufacturing organization's shipment and inventory performance in the same way that a mechanical engineer models tolerance buildup in a new product design. The objectives are to minimize on-hand inventory and optimize supplier response times.

Appendix I: Derivation of the Standard Deviation of Demand Given an R-Week Review Period - fe97a6a.pdf (18K)

Appendix II: The Expected Value and Variance of On-Hand Inventory when there are no Restrictions on Minimum Buy Quantities - fe97a6b.pdf (26K)

Appendix III: The Expected Value and Variance of On-Hand Inventory when there Are Restrictions on Minimum Buy Quantities- fe97a6c.pdf (22K)

Appendix IV: Incorporating SRT (Supplier Response Time) into the Safety Stock Calculations- fe97a6d.pdf (35K)

Appendix V: Derating the Service Level to Account for Reduced Periods of Exposure to Stock-outs as a Result of Minimum Buy or Economic Order Quantities-fe97a6e.pdf (15K)

Appendix VI: Estimating Weekly Demand Uncertainty from Monthly Data - fe97a6f.pdf (14K)

Appendix VII: Adjusting Safety Stock to Account for Yield Loss - fe97a6g.pdf (41K)

Additional information about Supply Chain Technologies can be found HERE.



Supply Chain.

SupplyChain

The supply chain is about the seamless interchange of business information. About linking every company's internal operations with those of its customers and suppliers. In the supply chain, every business function is integrated

and interdependent. Products and services become part of an infinite cycle of information—where each transaction begets a dozen more.

You don't have to look far to see the supply chain building. It permeates the core cycles of every profit center. Raw materials, manufacturing, warehousing, and distribution... right through transportation logistics. And even as these systems become more automated, they're being interfaced directly with corporate enterprise information systems.

The benefits of supply chain management are spreading throughout every corner of the economy, It's an unstoppable wave that demands a new level of technological sophistication from businesses of every size and description.

Gaining entrance to the new supply chain economy requires a basic set of enabling technologies that demand data capture systems. Achieving success requires managing these technologies more efficiently than competitors.

<u>Click here to subscribe to Supply Chain NewsLink</u>, ID Systems weekly e-mail headline summary of the latest supply chain trends, new products, and industry news covered in IDSystems.com's E-News section. You can also subscribe to the monthly print version of ID Systems magazine.

http://www.idsystems.com/reader/white/index.htm

<u>Unleashing Engineering Information to the Enterprise</u>
<u>to Speed Time-to-Market</u>
<u>Stacey Lawson, Parametric Technology Corp.</u>

Collaborative Engineering: Using E-Business for Increased Design Innovation Rishi Madobusi, IBM Corp.

<u>Commonwealth of Pennsylvania</u> Enterprise Resource Planning (ERP) Initiative.

<u>Niku</u> delivers enterprise-class applications to help source and manage your talent, provide for project collaboration, capture and share information, and automate the basic business process, through a browser.



The right advantage for your growing business from IBM.

Take care of your business - - on the web.

"They have what you need for e-business Solutions".

The <u>IBM Small Business Assistant</u> step-by-step guide helps you find the right solution for your business.

Prodigy Biz gives you all the tools you need to master your business, and will help

answer your questions.

Small Biz Web Sites on the Rise, Yet Many Owners Slow to Embrace the Internet - Prodigy Reveals Results of Nationwide Small Biz Study.

Some companies mandate that they will only do business with a company that is "ISO9000 certified". So your small startup needs to keep this in mind when setting up shop. It is easier to start out a new company and meet ISO9000 requirements than it is to get "buy in" from those entrenched in Status Quo in an established company—if you start from the very beginning of your operation.





INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

The <u>International Organization for Standardization (ISO)</u> is a worldwide federation of national standards bodies from some 130 countries, one from each country.

The mission of ISO is to promote the development of standardization and related activities in the world with a view to facilitate the international exchange of goods and services.

A common misconception is that the letters I-S-O are an acronym of International Standard Organization, when in fact, "ISO" is the short form of the organization's proper name. It is derived from the Greek *isos*, meaning "equal", which is the root of the prefix "iso-" that occurs in a host of terms—such as "isometric" (of equal measure or dimensions) and "isonomy" (equality of laws, or of people before the law). ISO, as a proper name, was chosen to prevent problems with translations of acronyms into different languages.

Most of us have run into a manager or organization touting "ISO 9000" as the solution to all product quality problems, and "ISO 14000" as the solution to all environmental, 'Green', problems. In ISO's own words, they want to put an end to company statements that imply that ISO 9000 signifies product quality or that ISO 14000 means that a product is "green". See their How to avoid false ISO 9000 and ISO 14000 claims leaflet if you would like to know more.

ISO 9000 and ISO 14000 are what is known as "generic management system standards". "Generic"means that the standards' requirements can be applied to any organization, regardless of the product it makes (or whether the "product" is actually a service activity). "Management system"refers to what the organization does to manage its processes.

If your "Management system" says that you can make lifejackets out of cement, and all of your Work Instructions have been properly audited and signed per the ISO 9000 guide lines, then your product is ready to ship, even though it would kill anyone foolish enough to use such a product. The next time you hear some one tout ISO 9000 as a quality system, find out what they *really* mean.

<u>ISO 9001 - 1994</u> Quality systems - Model for quality assurance in design/development, production, installation, and servicing.

ISO 9002 - 1994 Quality Model for quality assurance in production and installation.

<u>ISO 9003 - 1994</u> Quality systems - Model for quality assurance in final inspection and test.

There are four news sources I use to keep up with the minute-by-minute changes of eCommerce:

CIO WebBusiness - Strategies for Using the Web in Business.

NEWSBYTES® -

Example: <u>Poll Reveals Lack of E-Relationships.</u> A poll suggests that many online retailers will miss an opportunity to establish long-term relationships with customers.

Network Computing -

Example: <u>Simplicity Lies at the Heart of iPin's New Online</u> Payment Scheme.

Internet Week -

Example: <u>Bowstreet's Web Automation Factory</u> Leverages Directories And XML.

<u>Bowstreet</u> is also leading the push toward the <u>Directory Services Markup Language</u> (<u>DSML</u>) <u>standard</u>, which leverages the power of <u>XML</u> to mediate differences between proprietary directory structures.

XML and its relations are rapidly becoming the language of e-commerce.

http://www.w3.org/

The World Wide Web Consortium is where you can keep up with the recent developments in XML. If there is enough interest, XML might be worth a Resource Page of its own. Let me know.

Is buzzsaw.com what e-commerce might look like in the future?

<u>buzzsaw.com</u> is the building design and construction industry hub that delivers integrated business-to-business collaboration and e-commerce services for everyone in the building industry that needs a faster, more profitable way to work.

<u>buzzsaw.com</u> provides the building industry with integrated offerings for design collaboration, bidding, construction administration, and buying. In addition, <u>buzzsaw.com</u> fosters an online community for information exchange by providing industry contacts, relevant reference material and sources, pertinent news, and other services tailored to the needs of building professionals around the world.

By offering a broad array of basic services (including project hosting) at no charge, buzzsaw.com is transforming the industry. With its intuitive tools and resources,

<u>buzzsaw.com</u> makes it easy for everyone working on a building project to participate online.

Because of all of the legal requirements of starting a new business, I'll leave you with one last parting thought from Shakespeare -

2 KING HENRY VI Act 4, Scene 2; Blackheath.

DICK, the butcher:
"The first thing we do, let's kill all the lawyers."

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If you would like to add any information on this topic or request a specific topic to be covered, contact <u>Bob Paddock</u>.

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