
In the past year or two, many corporations have been trying out ways of streamlining their organizations using the power of IT-Information Technology. The universal nature of electronic communication on the Internet as a free and speedy medium of information transfer provided the means to allow suppliers, manufacturers, transporters and customers to do business in a new way. The 'back offices' of each component of the trade could be linked together 24/7-24 hours a day, 7 days a week.

Rather than use postal mail, fax, telephone and personal meetings to buy an article, place an order, send an invoice, confirm a shipment, make a payment--and all the other routine acts making up commerce--companies could eliminate clerks, sales personnel, even levels of management. The big idea is that all of industry, or specialized segments of it, could agree on standards, methods and protocols to handle these transactions electronically without paper and with fewer employees. Visions of speed, reduction of errors and, especially, cost savings danced in many heads. It would be business-to-business, or B2B.

Thus started the dot-com craze with venture capitalists throwing billions of dollars into all kinds of startups that often based their business plans on being the first to capitalize on a big "new-new thing". Computer code writers were assigned to create the electronic information systems needed to make it work.

The Internet was used to market products to individuals with credit cards. Amazon.com and e-toys.com were early successes in building volume of orders. The computer code makers devised secure systems to handle the confidential information and the details of confirming orders, shipping and billing. Many new companies offered all kinds of products. Many ran into trouble with "fulfillment"-sending the merchandise. The basic investments in inventory, employees and warehouses had to be made and profit was hard to realize. Relatively few of them have managed to stay in business in the big "dot-com shakeout."

While this retail activity was getting all the attention, corporations were already using the business-to-business counterpart. Numerous manufacturers and suppliers have long had private systems of similar nature, establishing electronic "just-in-time" ordering with their suppliers and with electronic advance order systems keyed to customers' anticipated needs.

In-house or outsourced IT experts developed custom computer communications systems for these...
companies. Secure electronic hard links over telephone lines allowed responsible subordinates in widely separated offices to make the day-to-day entries. People in different companies all using compatible software worked as if they were fellow employees, for the mutual benefit of all. Then entrepreneurs in the IT sector saw opportunities to found and grow their own businesses by creating service companies to act as middle men for companies in various industries still doing transactions the old way. They saw the opportunity to be the suppliers of whole systems to sell to the industrial giants: materials suppliers, energy suppliers, railroads and trucking companies, and others who could see the advantage of "back-room" operations being computerized but did not want to set them up themselves.

The chemical industry was one place this happened. New sites have been created. One of them, GE Plastics and its GE Polymerland has been in business for over a year with dozens of partners, paradoxically some of them competitors. The list of others should include BayerONE, MyAccount@Dow, Eastman and BuyTiconaDirect. These one-company efforts have been successful so far: GE's year 2000 plastics business hit $1.5 billion in Internet sales, Bayer reported 300 active customers using its site in the U.S. and Canada. More than 10% of Bayer's sales volume is through the site. About 8 to 9% of Eastman's sales, or about $425 million, are through its customer website and more than 15% of its sales are through all electronic channels.

A free-standing service, ChemConnect, is a chemicals exchange run by Chemical Week Associates. It recently crossed the $1 billion mark of transactions handled so far in 2001. Other exchanges and middleman sites include: elemica.com; eyeforchem.com and chematch.com. Some of these were recently formed by mergers and in these fast-moving times we should expect a winnowing out process. It should also be pointed out that not all companies have yet taken the plunge. Conservatism in industry hangs on and the siren call of the IT experts has not always worked. (Credit is owed to several sources. Among others they are Chemical Week Magazine and Chemical and Engineering News (ACS) and The New York Times.)

**MEMBER RECEIVES GREEN TEA PATENT**

Green tea has long been used in China as a beverage and for medical purposes. It is now a frequently recommended component of "natural" medicine regimes. The claims include antioxidant activity with the active ingredients named as polyphenols called catechins, particularly epigallocatechin gallate (EGCg). It is said that Asian populations show lower rates of cancers and that traditional doctors have known for centuries of its effectiveness.

Many health food stores and pharmacies sell green tea and green tea extracts with claims of general health promotion. As to scientific verification, catechins, the most prominent one being EGCg, have been cited in numerous clinical studies to provide benefits for conditions including cancer and ulcers. EGCg has also been shown in several animal studies to have cardioprotective and thermogenic effects, possibly making it a suitable replacement to Ephedra, a commonly used and controversial herb in diet formulations.

Green tea and extracts often contain not only the catechins but also caffeine. A few of these products make the claim that the caffeine has been removed. One of the members of ACC&CE, Ray Hauser (number 564) has obtained a patent on an improved process for extracting the polyphenols without the caffeine. Hauser's process for caffeine removal uses only ethanol and water
as solvents, unlike traditional processes, which use more troublesome solvents.

The United States Patent Office issued a new patent (6,210,679) to Botanicals International Extracts, one of Hauser's businesses stemming from his consulting practice. Hauser's green tea extract has been used in long-term chemo-prevention studies at the National Cancer Institute and the company is currently scaling-up operations and will have commercial quantities available by the end of the Summer 2001.

**HOW WOULD YOU DO IT?** This is a new feature. It is designed to encourage reader input. Please e-mail your response to the question below to peter_hay@att.net. Your responses will be printed in a future issue. If there is enough response, it may appear again.

**WHAT CAN BE DONE WITH CO2 FROM ENERGY PRODUCTION?**

The world will go on burning stuff (oil, coal, biomass, fermentation alcohol) for a long time. Even fuel cells can emit CO2. On the assumption that this is not good for global climate, how can the carbon dioxide be fixed and held on Earth instead of rising to the upper atmosphere?

**IRS LOOKS AT CONSULTANTS**

According to the IRS, as many as 8.5 million people work as consultants, two-thirds of them in construction, the service industry and retail or wholesale trade. But experts on the home-based and consulting businesses have said that the agency had been too slow to look into tax cheating involving consultants. They said that such inaction was hurting legitimate businesses.

The editor of Consulting Magazine in New York said that legitimate consulting firms and individuals are having their prices undercut by self-styled consultants who cheat on their taxes. He said that the population of people who hand out business cards and call themselves consultants is huge and growing and there is a huge opportunity for abuse just in the area of taxes. The Internal Revenue Service heeded this criticism and is teaching its auditors how to uncover tax cheating by self-styled business consultants and by corporations that use former employees as consultants to avoid withholding income, Social Security and Medicare taxes.

A new audit technique guide, posted in April at the I.R.S. Web site, instructs auditors to check the business records of consultants to determine whether they are improperly listing deductions on their tax return. An IRS spokesman said the existence of the guide did not imply that the agency thought it has a significant problem with cheating by consultants. He said the purpose of these guides is to help the auditor be better focused on issues that are relevant in an audit and to not waste the auditor's, or the taxpayer's, time. We get the general impression that IRS doesn't have the staff to audit very many companies and even fewer independent consultants. Still, in these times of government handing back taxes already collected, IRS auditors are being trained to go after the cheats.

**SUSTAINABILITY INDEX FOR STOCKS**
conventional criteria for sound investing, persons and fund managers, have been answering the call for evaluating corporations for factors such as human resources policies, corporate codes on environmental impact and relations with underdeveloped countries.

The philosophy is expressed in this statement by SAM Research (Sustainable Asset Management) of Zurich, Switzerland, "The concept of sustainable development - meeting economic, environmental and social needs of the present without compromising the ability of future generations to meet their own needs - is increasingly integrated into daily business. Sustainability guidelines influence consumer demand, technological innovation, legal developments, stakeholder activism and, as a result, company strategies."

The Dow Jones Sustainability Group Indexes (DJSGI) track the performance of sustainability leaders worldwide. They cover the top 10% of the companies that lead their industry in terms of economic, environmental and social criteria. They offer a basis for evaluating financial products and derivatives with a focus on corporate sustainability. And, most importantly, they serve as a benchmark for the increasing amount of sustainability-driven investments.

Dow Jones, with the collaboration of SAM, has recently released a list of leaders in the DJSGI list. They are the result of the multinational analysis of 68 industry groups in 21 countries, accounting for a total market capitalization of approximately 5 trillion dollars, or 19.1% of the Dow Jones Global World Index.

The listed companies, with their respective market sectors, include the following: BMW-Consumer Cyclical; Bristol-Myers Squibb-Healthcare; Credit Suisse Group-Financial; Deutsche Telekom Group-Telecommunications; Dofasco Inc.-Basic Materials; Fujitsu Ltd.-Technology; Procter & Gamble Co.-Consumer Non-Cyclical; Sulzer AG-Industrial; Thames Water Plc.-Utilities; Baxter International-Medical Products; Dow Chemical Co.-Chemicals; ING Groep N.V.-Insurance; STMicroelectronics-Semiconductors; Teijin Ltd.-Textiles & Apparel and Unilever N.V.-Food Product Makers.

Consultants with a social conscience should be aware that the investment community is interested in more than risk-security ratios and profit. One way to evaluate a corporation's overall soundness is the DJSGI.

INTERNET SITES OF INTEREST: VOLCANOES

Crazy about volcanoes? Try these specific volcano sites:

http://banana.ifa.hawaii.edu/crater/
http://www.geo.mtu.edu/~boris/VESUVIO.html

More general volcano sites:
http://www.volcano.si.edu/gvp/index.htm
http://www.cam.com/cam/Science/Volcanos/
http://www.geology.sdsu.edu/how_volcanoes_work
Camera views around the world:
http://www.cam.com/cam/