



TECHNO

THE BIG IDEAS THAT
ARE CHANGING EVERYTHING

TRENDS

TAKING SALES TO THE NEXT LEVEL, PART II

BY DANIEL BURRUS, CEO OF BURRUS RESEARCH



Last month, I covered the Golden Rule of Sales—give people the ability to do what they currently can't do but would really want to do if they

only knew they could have done it. This month, I would like to cover some additional areas to help take your sales to the next level.

REDEFINE THE VALUE YOU DELIVER

Always remember that you're not simply selling a "thing"; you're selling the competitive advantage of the product. In other words, part of your job is to help your customers use the product you sell to gain competitive advantage. No wonder margins are slim. Most companies simply sell the product, deliver it, and then leave. It's then up to the customer to figure out specific guidelines for maximizing the use of the product organizationally. Is it any wonder why so many customers underutilize their purchases?

Obviously you can't share secrets or proprietary information you learn about any of your other customers, but you can go beyond the guidelines and actually help customers figure out how to gain a competitive advantage by using your product. By offering that kind of knowledge, you could possibly even charge *continued on page 2*

OCTOBER 2007

VOL. XXIII, NO. 10

- Google Goes Mobile
- Hydrogen Separator
- Electronic Wallet
- Telemedicine 2.0
- Running Robot
- Biodegradable Plastics From BioFuels By- Products
- Miniature Gas Generator
- New Skin Graft Technique
- Solar Laser
- Fast-Charging Electric Car
- Fabrics That Stay Clean
- More Efficient BioFuels

VISIT TECHNO TRENDS.COM

For an easy solution to keep up on the rapidly changing world of science and technology, visit our new updated web site Technotrends.com

SIGN UP FOR OUR FREE VIDEO E-BRIEFING

Visit our web site www.Burrus.com and sign up on our home page to receive our free Video e-Briefing featuring highlights of our monthly Consumer Intentions and Actions Survey.

PUBLISHED BY: **burrus**
research

800-827-6770

www.burrus.com

TAKING SALES TO THE NEXT LEVEL, PART II *(continued from page 1)*

more for your product because now you're giving business value that far exceeds the value of the individual product.

REDEFINE PERCEPTION OF THE SALESPERSON

You need to shift from being a vendor to being a trusted advisor. A vendor simply supplies a product. A trusted advisor supplies true advantage. For example, a trusted advisor will recommend what is best for the customer, not best for the salesperson. When you seek that higher ground and become a trusted advisor, your clients trust you more. Remember that the future is all about relationships. Relationships are all about trust, and you gain trust by earning it. So never teach people to distrust you by stretching the truth or hiding some pertinent information. To differentiate, you need to raise the bar on trust.

REDEFINE YOUR LEVEL OF SALES SUCCESS

When you focus on redefining what you already have you can take your current offering and leverage it to new levels. That's when you become a sales leader, not because of some fast-talking sales pitch, but because of your commitment to your customers and their true needs. So focus on these four elements of redefining today and you'll be able to give your customers tools and solutions they never dreamed possible. As a result, both you and your company will attain new levels of success and realize the profit potential you always knew existed.

TECHNOLOGY NEWS HIGHLIGHTS

GOOGLE GOES MOBILE

Based on recent activities, it is very likely that Google will soon be entering the mobile telecommunications market with a new product called GPhone. Although the details are highly speculative, recent acquisition activity indicates that they may be developing their own cell phone based operating system. It's also likely that the new GPhone will support VoIP (through Google's own Gtalk) and the 3G standard for wireless data transmission. It's believed that one of the goals is to keep user costs low through mobile advertising. If this is the case, in all likelihood they will also offer a version that eliminates the advertising for a higher monthly fee. As to when the GPhone might hit the market, earliest estimates place it in the first quarter of 2008.

For information: Google, Inc., 1600 Amphitheatre Parkway, Mountain View, CA 94043; phone: 650-253-0000; Web site: www.google.com/about.html

HYDROGEN SEPARATOR

Japanese researchers have developed a cylindrical ceramic membrane that can separate hydrogen from methane gas. It consists of three separate layers, each having progressively smaller pores, the smallest of which is just large enough to allow hydrogen molecules through. Nickel and palladium catalysts drive a reaction that breaks down methane into hydrogen and carbon monoxide. Because the catalysts are so tightly bonded to the membrane, the reaction can be carried out at much lower temperatures than would typically be required (i.e. 500 degrees Celsius as opposed to 800 degrees Celsius). The system could someday be used to generate hydrogen from city stores of methane gas and supply it to fuel cells in homes and cars.

For information: Japan Fine Ceramics Center, 2-4-1 Mutsuno, Atsuta, ku, Nagoya, 456-8587 Japan; phone: +81-52-871-3500; fax: +81-52-872-3503; Web site: www.jfcc.or.jp/en

ELECTRONIC WALLET

A new gadget, due to be introduced in 2008, is designed to replace your bulging wallet and all the credit cards you carry in it. Called iCache, the device is as thin as a Motorola RAZR phone and will sell for \$99. To set it up, users upload their credit card information and their fingerprint to the iCache Web site. When they want to make a purchase, they then activate the device using the built-in biometric fingerprint reader. A list of the available cards appears on a screen, and when one is selected, a plastic card pops out of the device. The card is temporarily loaded with the appropriate account information, but once it is swiped, the information is erased. iCache can function as a credit card, debit card or even as a customer loyalty card, and it will work with magnetic stripe terminals, bar code readers, or contactless payment systems, such as RFID and near field communication (NFC).

For information: iCache, One Broadway, 14th floor, Cambridge, MA 02142; phone: 866-414-5554; fax: 617-249-0690; Web site: www.icache.com

TELEMEDICINE 2.0

Camera-equipped cell phones may be paving the way to making people healthier, thanks to some innovative new services that can link patients with healthcare professionals faster than ever. FoodPhone, which has been available since May 2006, allows users to take snapshots of their daily meals and build an online diet journal. A team of expert nutritionists analyze the information and provide personalized feedback and coaching. The subscription fee of \$10 per month also includes access to food journals, health profiles, a “diet dashboard” and a peer community network to help dieters stay on track. The company will soon be releasing two new services – BabyPhone and DoctorPhone – both of which are designed to improve healthcare access through real-time videoconferencing with medical professionals.

For information: Myca Inc., 2750 Einstein Street, Suite 230, Ste-Foy, Quebec G1P 4R1 Canada; Web site: www.myca.com

RUNNING ROBOT

Some of the everyday activities that we take for granted are monumental tasks for the average robot – like running over uneven surfaces. So when scientists looked for a model to design a mobile robot after, they naturally looked to human physiology for clues. As it turns out, the brain is not totally in control of movement. For example, when walking over flat terrain, local sensors and reflexes do most of the work. But when the terrain changes, the higher cognitive functions kick in to make appropriate changes in posture and gait. This is precisely the way they’ve designed RunBot, the first robot that can “learn” to walk the way humans do. When RunBot encounters a hill, its standard locomotion circuitry is insufficient to keep it from falling over. So it automatically engages visual sensors and higher level balance circuitry to “see” the hill and make the necessary adjustments. The technology is being refined for use in future prosthetic devices.

For information: Florentin Worgotter, Georg-August-University, Bernstein Center for Computational Intelligence, Wilhelmsplatz 1 (Aula), 37073 Göttingen, Germany; phone: +49-551-517-6528; fax: +49-551-517-6449; email: worgott@chaos.gwdg.de; Web site: www.uni-goettingen.de/

BIODEGRADABLE PLASTICS FROM BIOFUELS BY-PRODUCTS

Dealing with the by-products of biofuel production is becoming increasingly important as the use of eco-friendly sources of energy continues to increase. Recently, Japanese researchers found a way to turn one of those by-products – glycerin – into raw material for manufacturing biodegradable plastics. They discovered that when glycerin is mixed with alkaline water and heated to 300 degrees Celsius at 12 megapascals of pressure, it produces a stable reaction that converts the glycerin into lactic acid. This in turn, can be used to produce polylactic acid, a biodegradable polyester that could be used for a variety of applications from biomedical products to disposable plastic packaging.

For information: Tohoku Electric Power Co., Inc., 1-7-1 Honcho, Aoba-ku, Sendai, Miyagi 980-8550, Japan; Web site: www.tohoku-epco.co.jp/index-e.htm

MINIATURE GAS GENERATOR

Turbine electric generators are a desirable alternative to batteries in many applications because they can provide power continuously without needing to be recharged. However, size and weight has limited their use as power sources for robots and other mobile machinery. A prototype gas generator was recently developed that is capable of generating up to 1 kilowatt of power in a device about one-fifth the size of current turbine generators. The key is in the rotor, which runs on special air bearings, allowing it to rotate at rates of 500,000 to 600,000 revolutions per minute – five to six times faster than traditional turbines. As a result, the new gas generator measures only 10 cm in diameter and 15 cm in length, and will weigh only a fraction of traditional devices.

For information: IHI Corporation, Toyosu IHI Building, 1-1, Toyosu, 3-chome, Koto-ku, Tokiyō 135-8710, Japan; phone: +81-3-6204-7800; fax: +81-3-6204-8800; Web site: www.ihico.jp/index-e.html

NEW SKIN GRAFT TECHNIQUE

The Japanese Health Ministry recently approved the clinical use of cultured autologous epidermis (skin tissue) for treatment of burns. The grafts are made by taking a sample of skin from the patient, separating the cells and placing

them into a culture medium with other special cells where they can multiply. The result is a sheet of tissue made from the patient's own skin. The product has been used successfully on patients with burns over more than 30 percent of their body. However, the current cost of the treatment is upwards of 10 million yen (approximately \$90,000US). As with most innovations, the price will drop as more use it.

For information: Japan Tissue Engineering Company, Ltd., 6-209-1 Miyakitadori, Gamagori, Aichi 443-0022, Japan; phone: +81-533-66-2020; fax: +81-533-66-2019; Web site: www.jp-te.co.jp/english/index.html

SOLAR LASER

A device that efficiently converts sunlight into laser light represents a big step forward in the design of solar power systems for use in space. Current devices are able to convert only about 10 percent of solar energy into laser light energy, while the new system is capable of achieving efficiencies of up to 40 percent. The collector plate is made from sintered powders of chromium and neodymium. The addition of chromium permits the collector to utilize a broader range of wavelengths. Sunlight is collected and stored, and when a weak laser is directed at the plate, the stored energy is transferred to the laser, amplifying its strength. By repeating this procedure a series of four times, the researchers were able to amplify the power of a .5-watt laser to 180 watts.

For information: Japan Aerospace Exploration Agency, 7-44-1 Jindaiji, Higashi-machi, Chofu-shi, Tokyo 182-8522, Japan; phone: +81-422-40-3000; Web site: www.jaxa.jp/index_e.html

FAST-CHARGING ELECTRIC CAR

Subaru is currently developing an electric car that will be able to be recharged in as little as five minutes. The R1e is powered by sixteen battery modules, each containing twelve lithium ion cells. Microcomputers in each module monitor the voltage at both terminals of each cell to reduce the current once a certain voltage is reached and reroute it to other cells that are not yet fully charged. This also ensures that the lithium ion cells are not overcharged. The company plans to commercialize the R1e within three years.

For information: Fuji Heavy Industries Ltd., 1-7-2 Nishishinjuku, Shinjuku-ku, Tokyo 160-8316, Japan; phone: +871-03-3347-2111; Web site: www.fhi.co.jp/english/

FABRICS THAT STAY CLEAN

Researchers have developed a new photocatalyst that can keep fabrics clean by degrading organic compounds on contact. The catalyst – titanium oxide – cannot be applied directly to textiles because it can cause damage to the fibers. However, when it is encapsulated, the compound may be applied to clothing or other fabric items without making direct contact. To accomplish this, titanium oxide is coated with hydrocarbons and heated. As a result, the catalyst is trapped inside a porous shell of silicon dioxide, through which small organic compounds can be absorbed and broken down.

For information: Osaka University, 1-1 Yamadaoka, Suita, Osaka 565-0871, Japan; Web site: www.osaka-u.ac.jp/eng/

MORE EFFICIENT BIOFUEL

A new process has been developed that increases the output of bioethanol from 5 grams per liter of raw material to 20 grams. The system is based on the use of a special yeast that ferments the sugars extracted from plant material. Because it can remain active under high temperatures and other extreme conditions, efficiency is greatly improved. The system is due to begin shipping once final testing has been conducted.

For information: Mitsui Engineering and Shipbuilding Co., Ltd., 6-4 Tsukiji, 5-chome, Chuo-ku, Tokyo 104-8439, Japan; Web site: www.mes.co.jp/english/

Technotrends is published 12 times a year by Burrus Research, Inc., a research and consulting firm that monitors global advancements in science and technology and their direct impact on business and consumers. Patti Thomsen, Editor P.O. Box 47, Hartland, WI 53029-0047. To subscribe, call 800-827-6770, or email office@burrus.com. © 2007 Burrus Research, Inc.