

Art—The Interactive Experience

Following an international tendering procedure, Hypertech has been appointed by the State Contemporary Museum of Modern Arts to design and develop interactive digital applications for the promotion and presentation of the Museum's cultural treasures. The museum, based in the city of Thessaloniki, has a collection of post-modern paintings and artifacts. The project is to enhance the on-site experience of the visitor by introducing new technological tools for navigation, access and interoperability with the exhibits. In addition, Hypertech is to expand the existing interactive portal into a new more advanced tool for presentation and interaction with virtual visitors from across the globe. Hypertech is the Technology branch of TREK Consulting Group.

No Visa? No Problem



Because of the United States' current immigration and regulatory regime, bold and creative entrepreneurs from around the world aren't given the chance to come to Silicon Valley and develop the technologies that could be creating jobs and propelling the economy forward. Blueseed aims to solve this problem so that Silicon Valley remains the world's center for innovation. The Blueseed team, backed by Paypal founder Peter Thiel, is creating a high-tech visa-free entrepreneurship and technology incubator on an ocean vessel in international waters. Facilities will be a short ferry ride away from Silicon Valley so that great ideas and talent from around the world can live, work, and play while having convenient access to the San Francisco Bay Area. The project will provide a customized environment centered around smart, proven, cost-effective legal best practices, and modern living and work accommodations.

Fiber Optics—Take Two

Researchers in the United States, Italy, and France have invented transistors made from cotton fibers that could be woven into clothing capable of measuring pollutants, T-shirts that display information, and carpets that sense how many people are crossing them. "We want to create a seamless interface between electronics and textiles," says Juan Hinestroza, director of the Textiles Nanotechnology Laboratory at Cornell University, in Ithaca, N.Y. To make a fiber conductive, the team coated each strand with gold nanoparticles and added a thin layer of a conductive polymer. They created an organic electrochemical transistor and an organic field-effect transistor by doping the conductive fibers with a semiconducting polymer.

Run, Baby, Run

For the first time, scientists are beginning to understand how exercise works on the body and mind to make us healthier. It seems that physical exertion helps promote autophagy, derived from the Greek for 'self-eating', which is the body's process of recycling worn-out or malformed proteins. In research conducted in Texas, mice which ran on treadmills produced more autophagosomes in their muscles and mice who could not produce autophagosomes became more easily fatigued and processed less sugar from the bloodstream.—*Big Think*

20 MENU TRENDS



In a survey of nearly 1,800 chefs who belong to the American Culinary Federation, conducted from October–November 2011 by the National Restaurant Association, locally sourced meats and seafood was the top trend predicted for 2012, followed by locally sourced produce. Hyper-local items, such as ingredients from restaurants' own gardens, rank fourth on the list, and a third of chefs at full-service restaurants who were surveyed said they had gardens on-site. The top 20 predicted hot menu trends are:

- 1 **Locally sourced meats and seafood**
- 2 **Locally grown produce**
- 3 **Healthful kids' meals**
- 4 **Hyper-local**
- 5 **Sustainability as a culinary theme**
- 6 **Children's nutrition as a culinary theme**
- 7 **Gluten-free/food allergy-conscious items**
- 8 **Locally produced wine and beer**
- 9 **Sustainable seafood**
- 10 **Whole grain items in kids' meals**
- 11 **Newly fabricated cuts of meat, such as the pork flat iron and the beef petit tender**
- 12 **Farm/estate-branded items**
- 13 **Food trucks/street food**
- 14 **Artisan spirits**
- 15 **House-made/artisan ice cream**
- 16 **Health/nutrition as a culinary theme**
- 17 **Non-traditional fish**
- 18 **Fruit/vegetable kids' side items**
- 19 **Children's mini-meals (i.e. smaller versions of adult menu items)**
- 20 **Culinary cocktails**

ENTREPRENEURS, TAKE NOTE

The Adventure Ecology founder David de Rothschild hopes to launch the Plastiki Expedition in April, in order to raise awareness about recycling, waste, and consumption.

A team of scientists and explorers, led by de Rothschild, will try to sail the 11,000 miles from San Francisco to Australia on a 60-foot catamaran entirely made from recycled plastic (except for metal masts). The unique craft will be propelled solely by sails, and everything will be recycled, including the boat itself, assuming they complete the dangerous journey. Two wind turbines and solar panels will provide power for electronic equipment. The Plastiki's twin hulls will be filled with 12,000 to 16,000 two-liter soda bottles, which are currently being washed and filled with dry-ice powder, which pressurizes them to make them rigid. A bit of woven PET fabric will tie the whole thing together. In true explorer style, the Plastiki will be launching a 'Message in a Bottle' with the help of artist, Jay Little. Unlike the days of old, this bottle will be tracked using satellite technology so you will be able to follow its progress and watch as it travels through the ocean currents.

► www.theplastiki.com/messageinabottle/



Independence for the Elderly

The USEFIL project aims to address the gap between technological research advances and the practical needs of elderly people by developing advanced but affordable in-home unobtrusive monitoring and web communication solutions. USEFIL intends to use low cost "off-the-shelf" technology to develop immediately applicable services that will assist the elderly in maintaining their independence and daily activities. Installation of the USEFIL system will not require retrofitting in a person's residence and will be almost invisible once installed. Because the system will be "software driven," based on open source platforms, applications can be easily added or subtracted with no real limit to the overall number of services offered. Furthermore, USEFIL intends to provide guidelines for the community of technology developers to optimize future generation of applications for an ageing population. USEFIL will deploy systems and applications that can unobtrusively record elderly behavioral indicators such as cognitive decline, emotional status and vital health signs; supply information services in parallel; and provide the means to enable individuals to keep their social life active—all irrespective of an older persons mobility state. The technology should extend the time that older people can live independently in their homes while limiting increases in public expenditure. USEFIL: Unobtrusive Smart Environments for Independent Living is a EU Project being led by the National Centre for Scientific Research "Demokritos."

Modeling the Energy Market with Cassandra

Project Cassandra aims to build a platform for the realistic modelling of the energy market stakeholders, also involving small-scale consumers. Cassandra will not provide another tool for visualization, but will rather provide users with the ability to test and benchmark working scenarios that can affect system operation and company/environmental policies at different levels of abstraction, starting from a basic level (single consumer) and shifting up to large consumer areas (a city). The project main outcomes will be the aggregation methodology and the framework of key performance indicators for scenario assessment, as well as an expandable software platform that providing different energy stakeholders with the ability to model the energy market, in order to assess scenarios for their own purposes. Cassandra is a 3.6 million Euro project led by the Centre for Research and Technology Hellas and funded under the EU's Seventh Framework Program. Cassandra: a multivariate platform for assessing the impact of strategic decisions in electrical power systems.

