BLOOMBERG BRIEFING

A look at regional consumer confidence in July



APP OF THE WEEK 'Motion Math: Hungry Fish'

In a nutshell: Attention parents: With school starting in just a few weeks, it's time to sharpen the brain. "Motion Math: Hungry Fish" helps young students prac-tice addition and subtraction. A fish swims around in the water, swallowing numbers that float in bubbles. Touch two

numbers that float in bubbles. Touch two bubbles to add the numbers together. **Cool factor:** Hungry Fish is one of several number games that have been developed by the San Francisco startup Motion Math — and its most popular to date. Students can also practice multipli-cation, fractions and other math skills with additional apps. A study by a USC professor found that student test scores improved after they practiced fractions



with a Motion Math app. **Note:** Though the basic app is free to download, parents will have to pay \$1.99 to \$6.99 to access other parts of game, including subtraction.

Susiness Report

The Chronicle with Bloomberg

SAN FRANCISCO CHRONICLE AND SFGATE.COM | Monday, August 12, 2013 | Section D

SOCIAL MEDIA

Upworthy curates videos for repackaging to go viral

By Sam Grobart

Doctors gave Zach Sobiech bad news just after his ryth birthday last year. His rare bone cancer had progressed so far that he had only a year to live. In December, Sobiech posted a music video of "Clouds," a song he wrote and recorded dowut truverline with recorded about struggling with the disease. He became the

TECHNOLOGY

subject of a short online video

subject of a short online video documentary, which garnered tens of thousands of views after being featured on FoxNew-s.com and People.com. Sobiech died on May 20. Then the editors at viral-media site Upworthy saw the documentary. They repackaged it with the headline "This Kid Just Died. UNA HE Left Behind Is Wondtacular." Since then,

more than 15 million people have watched the documentary on Upworthy, which aggregates and popularizes videos and other online content. Sobiech's song went to No. 1 on Apple's iTunes Store, and a link Upworthy put next to the video raised more than \$200,000 for cancer research

\$300,000 for cancer research. The whole Internet heard his

Upworthy continues on D2



Upworthy's website promotes meaningful stories in videos by using social media to reach as many people as possible.



Professor Steven Glaser adjusts the or at a wireless sensor network station.

Sensors so smart they feel, think

Network of iPhone-size devices keeps tabs on state water supply

By Olga Kharif

In February, six students on snowshoes battled as much as 12 feet of snow to penetrate into the heart of the American River basin. Moving through dense forests and meadows,

they mounted 90 iPhone-size machines, designed to measure everything from soil moisture to temperature and relative humidity, onto 16-foot poles that beam data to researchers like Steven Glaser, a professor at UC Berkeley.

With additional trips this summer, Glaser hopes to create the world's largest sensor network, com-Sensors continues on D4



nember of Glaser's team helps erect a 16-foot pole top-by a small sensor to measure the state's water supply.

Bay Area's tech titans dominate young rich

TECH CHRONICLES

Silicon Valley has no shortage of ultra-wealthy, ultra-young (considering their wealth) individuals. A recent ranking of "technopreneurs" under 30 according to wealth bears that out. The young billionaires and multimil-ionaires on the list compiled by Wealth-X, an intelligence provider that tracks the fortunes of the richest of the rich, include some familiar names from Bay Area tech firms. Spoiler alert: The founders of Face-book took the survey's top slots. And here's another non-surprise: Every person in the opt en is male. **Tech continues on Dz**

DAVID EINSTEIN Tech Support

Are low-cost computers worth price?

Q: I was shopping for a laptop com-puter recently and came across a couple of Chromebooks — a Sam-sung model for \$249 and an Acer sung model for \$249 and an Acer for \$199. Why are they so much less expensive than other laptops? Does that mean they're not as good?

A: Chromebooks are "cloud comput-ers," which means they are geared for working online. Since most software *Einstein continues on D3*



msung's Chromebook is a clo mputer and doesn't run Wind Sam

BUSINESS The Chronicle with Bloomberg

Sensors so smart they feel and think

ors from bage D1

prised of 7,500 devices that will inform rethat will inform re-searchers and govern-ment agencies for the first time in detail how much water California has in its coffers – crit-ical data for farmers and state planners. The net-work will be among the largest tests of a new kind for anone one that kind of sensor: one that feels as well as thinks, while using very little power — a D-cell battery power – a D-can last years

'A world of things'

Glaser's gadgets come equipped with silicon from Linear Technology and Cypress Semicon-ductor that turns them ductor that turns them into minicomputers. They're part of a genera-tion of intelligent sen-sors whose sales may rise about to percent a year to reach \$6.9 billion in 2018, according to Transparency Market Research. Unlike dumb predecessors that gath-ered data and passed it to a central server to analyze, these devices monitor the informa-tion's quality and pertion's quality and per-form advanced calcula tions. "It's smart cities

"It's smart cities, smart buildings, smart water," said Susan Eus-tis, president of Win-terGreen Research. "It's enabling a world of things. It's going to grow unbelievably fast."

unbelievably fast." The market for sen-sors integrated with processors will reach 2.8 trillion devices in 2019, up from 65 million this year, according to Win-terGreen. Some of these sensors could be no larger than a pinhead. Linear went into full production with its new system for smart sen-

system for smart sensors, complete with a sors, complete with a g2-bit processor based on ARM technology, this month. IBM, Freescale Semiconductor, Qual-comm, Silver Spring Networks, Sensus USA and Streetline are de-signing more powerful and capable processors or sensors as well or sensors as well

or sensors as well. Smart-sensor equipment maker Silver Spring held an initial public offering in March, and has seen its shares surge 88 per-cent since. One early example of the industry's potential is Nest, the thermostat that can be adjusted with a mobile applica-tion and learns your temperature preferences.

'We are swim· ming in sensors. and drowning in data. Sensory data is growing at such a rate that our ability to make sense of it is highly constrained." Dharmendra Modha, principal investigator at IBM

Startup Colorado Micro Devices has built a pro-totype sensor that noti-fies owners if a door is locked via a messaging correies

service. "I think it's going to "to way all "I think it's going to be huge, the way all sensors are going to operate," said Linear Chief Technology Officer Kris Pister. "A good analogy is the phone and apps. Ten years ago, no one knew what an anp was."

app was." One reason for the surge is that it's becom-ing important to have sensors quickly separate important data from the chaff before sending it to a central server.

chaff before sending it to a central server. "We are swimming in sensors, and drowning in data," said Dhar-mendra Modha, a prin-cipal investigator at IBM. "Sensory data is growing at such a rate that our ability to make sense of it is highly con-strained."

sors' efficiency

One gas turbine, for instance, can have 100 sensors that generate 1,000 pieces of data ev-ery second, according to General Electric Co. Smarter sensors may Smarter sensors may only alert the central computer of something out of the ordinary, in-

out of the ordinary, in-dicating overheating or another potential failure. "The more you can rely on sensor networks to control some aspects, the more efficient it can be," said Jonathan Col-lins, an analyst at ABI Research.

Research. One drawback of many smart sensors is cost. In Glaser's water project, the sensors may project, the sensors may seem pricey at \$500 a pop — yet "if you are talking about the billions of dollars value for wa-ter, \$500 per node isn't expensive," (Glaser said. As the number of installed sensors grows, average selling prices will drop to less than \$1



ember of Professor Steven Glaser's team from UC Berkeley makes notations about one of the sensor will help measure the state's water supply while recording temperature, relative humidity and more

ach from about \$50,

Eustis said. As part of a research collaboration, a year ago IBM announced a special low-power processor for sensors. Its design is more akin to how the more akin to how the brain functions than today's computer proces-sors. Applications could include a grocer's glove that smells produce to find contaminated prod-ucts, and a tiny, jellyfish-like device that floats on

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SO ORDERED this 26th day of July, 2013.

NOTICES OF PROBATE

NOTICE OF PETITION TO ADMINISTER ESTATE OF ra Smit, DECEDENT NUMBER: PES-13-296879 heirs, beneficiaries, credito

ER: PES-13-296879 beneficiaries, credito ditors, and perso wise be interested state, or both, of Barba for Probate has be Yardley in the Superior dley in the Sup , County of San for Probate rec ey be appointe ientative to adm

al repres as per representative to administer ... of the decedent. etition requests the decedent's nd codicils, if any, be admitted to te. The will and any codicils are ble for examination in the file

on the petition of as follows: st 14, 2013. at 9:00 AM rt of California

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are a creditor or a cor itor of the decedent. yo

nammond Hammond Law Group, PC One Embarcadero Center, Suite 2360 San Francisco, CA 94111 (415) 955-1915 Publication dates: August 4, 7, 12, 2013 FICTITIOUS BUSINESS

n or account as provided in F de section 1250. A Required cial Notice form is availabl court clerk.

ney for petitioner n L. Hammond mond Law Group Embarcadaro

FICTITIOUS BUSINESS NAME STATEMENT FILE NO. A-0352931-00

ng person is R EDGE REAL #989 SF, registrant #1 #318, Sar

d to transact

This statement was filed with County Clerk of San Francisco on: August 8, 2013 12, 19, 26, Sept. 2, 2013

FICTITIOUS BUSINESS NAME STATEMENT FILE NO. A-0352476-00

The following person is doing busine as: Fortify Energy Company, 235 Ch. tanooga Street, San Francisco, S. Francisco County, CA 94114. Fi name of registrant: Inspirasian Pre LLC (CA), 235 Chattanooga Street, S. Francisco, CA 94114. This business conducted by a Limited Liabil

gistrant commenced to transac ess under the above-listed ficti-business name on 08/01/2013.

This statement was filed with th County Clerk of San Francisco on: August 1, 2013.

Anen your door to more

an Francisco Chronicle | SFG



A Glaser team member checks out the sensor that will be attached to a 16-foot 's water supply and beam the data to researchers. pole to help measure the

the ocean's surface and collects data on oil spills and tsunamis, Modha said. Yet another use: smart glasses that could guide the visually im-raired

Managing parking

smart sensor systems using microcontrollers

from Texas Instruments that help manage park-ing in 35 cities. Related

DILBERT By Scott Adams

mobile apps tell drivers where parking spaces come available, and let cities adjust parking fees based on demand. "We are still at the beginning stages of this," said Geoff Mulli-gan, chairman of in-dustry group IPSO Alli-ance, which focuses on enabling communication among smart objects. Its foo members include Oracle, Nokia and Cisco

Systems, which is work-ing with Streetline to install a sensor network to monitor parking spac-es at its offices. "We've not even con-ceived the possibilities of applications for this," Mulligan said. "We are at a tipping point for it to begin to explode."





comornia law, snowledgeable in You may examine the file kept by the court. If you are a person interested in the estate, you may file with the court a Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets of the or are court.

This statement was filed with the County Clerk of San Francisco on July 18 2013

Publication dates: July 22, 29; August 5, 12, 2013

FICTITIOUS BUSINESS NAME STATEMENT FILE NO. A-0352780-00

The following person is doing business as: (1) LAMB Oxford; (2) LAMB Ox-ford MTC, hc, 6754 Bernal Ave, 740-414, Pleasanton, CA 94566. Full name of registrant #1: LAMB. Oxford Man-agement and Technology Company, Inc. (SA), 6754 Bernal Ave, 740-414, Pleasanton, CA 94566. This business is conducted by a corporation.

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Olga Kharif is a Bloomberg writer. E-mail: okharif@bloomberg.net