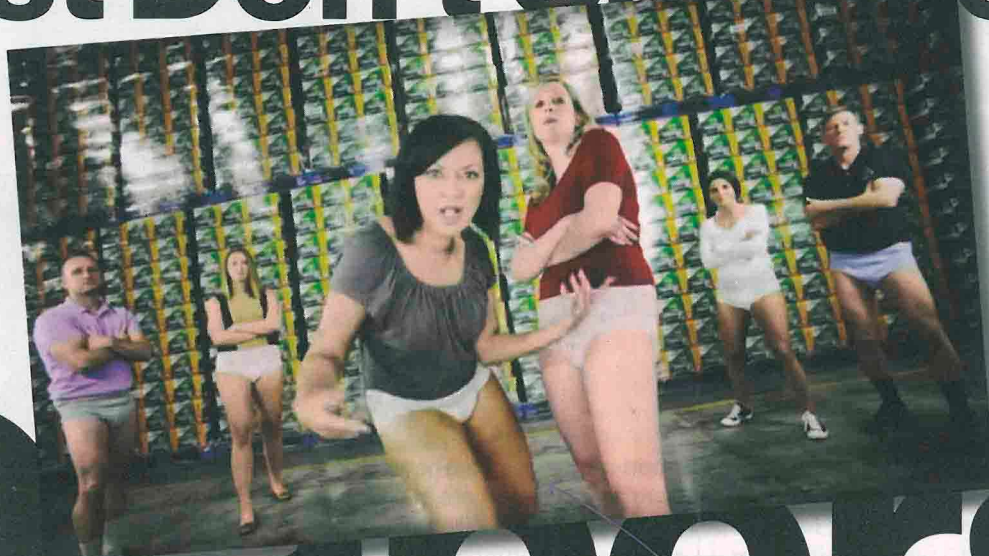# Just Don't Call Them Diapers

▶ **Sales of adult incontinence garments in the U.S. could equal those of baby diapers in a decade**

▶ **"Hey, I have bladder leakage, and it's no big deal"**

Thanks to the endless determination of parents to keep baby bottoms dry, **Kimberly-Clark**'s Huggies diapers brand has become a global powerhouse, with billions of dollars in annual sales. But the target consumers for one of the company's latest diaper lines aren't infants—or even their aged grandparents. Instead, ads for its Depend Silhouette line of disposable incontinence briefs feature laughing, long-legged models who look barely over 40. The personal-care giant has been aggressively running the fashion-style marketing pitches in mainstream magazines and on television, because adult incontinence is a market that's recently become too big—and lucrative—to remain in the shadows.

"We're trying to make the product more normal, and even fun, with real people in our ads saying, 'Hey, I have bladder leakage, and it's no big deal,'"

says Jay Gottleib, head of Kimberly-Clark's adult and feminine-care business in North America.

Growth in the adult-diaper market is outpacing that of every other paper-based household staple in the U.S. Euromonitor International forecasts a 48 percent increase in sales in the category, to $2.7 billion in 2020 from $1.8 billion last year. That compares with expected growth of 2.6 percent, to $6.3 billion, during that period for baby diapers. And in only a decade, sales of diapers for adults could surpass those for babies at Kimberly-Clark and rival **Procter & Gamble**. As birthrates fall and life spans lengthen, the companies figure there's plenty of room for expansion, because babies grow out of diapers, but incontinent adults usually don't.

As many as 1 in 3 adults—more than 80 percent of them women—have bladder control issues, the Urology

Care Foundation says. Causes include pregnancy and childbirth, health conditions such as diabetes and obesity, and changes that accompany aging, according to the Mayo Clinic.

To tap that market, manufacturers have rolled out marketing campaigns to make a leaky bladder seem if not fashionable, then at least not humiliating. Kimberly-Clark sponsored a free concert in New York featuring the Grammy-nominated indie pop band Capital Cities to promote its adult products. It even produced a <mark>rap video</mark> featuring Kimberly-Clark employees strutting their stuff around one of the company's factories while wearing nothing below the waist except its adult briefs. The rap lyrics explain that incontinence hits people of all ages and encourage listeners to "drop their pants for underwareness." The company also introduced a social media campaign to raise money for an

Driverless cars
don't want to play
in the snow 18

Briefs: The Force is
with Disney; Facebook
blocked in India 19

incontinence-awareness charity.

"They're driving home the point that attractive people in their 40s and 50s or even younger, not just nursing-home residents, can be wearing this under their clothing," says Marlene Morris Towns, a teaching professor of marketing at Georgetown University.

Incontinence briefs, available in different styles for men and women, look a lot like regular underwear and come in a range of colors. Instead of being stacked on shelves like baby diapers, some of Kimberly-Clark's latest adult incontinence gear comes in packaging that hangs on hooks in store displays and has transparent windows that show the absorbent disposables folded like cotton underpants. A box of 10 Depend Silhouette Active Fit briefs sells for $11.97, or about $1.20 each, at Walmart.com. A 44-count box of the company's Huggies Snug & Dry diapers for infants costs $7.97, or about 18¢ each.

When casting the ads for its active-fit Silhouette briefs, the company hired models and brand ambassadors a generation younger than its former white-haired spokeswoman, the late actress June Allyson. Among them: comedian and television star Sheryl Underwood, 52, and slam poet "Mighty" Mike McGee, 40.

Svetlana Uduslivaia, a head of tissue and hygiene research at Euromonitor, says newer goods such as Depend

Silhouette and P&G's Always Discreet are thinner and less discernible under clothing, and in general are designed for more physically active consumers. They "wouldn't be very suitable for those with more serious forms of adult incontinence usually associated with older seniors," she says. So the products' strong sales growth might suggest that younger people are drawn to them. A Kimberly-Clark spokesman says the company doesn't yet have numbers to show its more youthful push is working. It suggests many younger incontinence sufferers still use products not intended to handle the problem (such as sanitary pads) because of a reluctance to buy goods designed for seniors—a stigma that its media campaign hopes to end.

Kimberly-Clark has more than half the U.S. incontinence-garment business, with 56 percent of sales last year, compared with 9 percent for P&G and 7 percent for Sweden's **Svenska Cellulosa**, maker of the Tena brand of incontinence goods, Euromonitor estimates. Unlike Kimberly-Clark, P&G targets only women with one of its product lines—Always Discreet, introduced in 2014. Women already are familiar with the company's Always brand, which includes such female personal-care products as menstrual pads and liners. "Always Discreet has been very successful in bringing along a lot of the younger women, because it's a brand that they trust," says Yuri Hermida, vice president of North American baby and feminine care at P&G.

Hoping to grab an even bigger slice of the incontinence market, Kimberly-Clark last year introduced Poise Impressa bladder supports for women, one of the first incontinence products to be worn internally. It's designed to help prevent urinary leaks rather than simply absorb them. Inserted into the vagina like a tampon, it lifts and gives support to the nearby urethra, which in turn helps stop urine from leaking out. The target audience includes women who suffer so-called stress urinary incontinence, often triggered by coughing, sneezing,

or even dancing. Ads for the product feature a smiling middle-aged woman and a marketing pitch that promises to "let you laugh without leaks." More than laughter, for Kimberly-Clark the products may bring in serious profits. —*Carol Hymowitz and Lauren Coleman-Lochner*

The bottom line Sales of adult incontinence products are forecast to rise 48 percent from 2015 to 2020. Baby diaper sales will grow 2.6 percent.

Entertainment

YouTube Is Banking On Unicorns and Aliens

▶ The video-sharing site looks to its stars to bring in more revenue

▶ "The strategy is to fish where the fish are"

Lilly Singh, a 27-year-old **YouTube** personality, has delighted teenagers for six years from the comfort of her couch. Using a small video camera and a computer, Singh, known to her fans as "Superwoman," uploads funny sketches about her parents, her South Asian and Canadian heritage, and her crushes.

With almost 8 million subscribers following Singh's main channel for free, YouTube decided to invest in the Internet star when it heard she was making a documentary, *A Trip to Unicorn Island*. The film follows Singh as she tours the world performing sketches, singing, and giving motivational speeches—material similar to what she posts on her channel.

A Trip to Unicorn Island, which made its debut on Feb. 10, is one of several programs YouTube is promoting as part of its $9.99-a-month YouTube Red pay service, available to U.S. customers. ▶
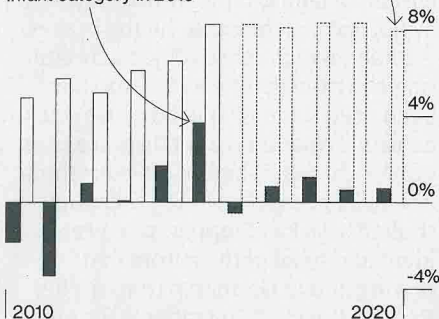
The Diaper Grows Up

% Growth

■ Infants □ Adults*

$6.2b
Retail sales for the infant category in 2015

$2.7b
Estimated sales for incontinence products in 2020, up from $1.8b this past year

2010   2020

17

◀ **Google**, which bought the video-sharing website in 2006 for $1.65 billion, plans to make YouTube more profitable by creating a revenue stream with Red. Like **Netflix** and **Amazon.com**, Google is offering original programs, but instead of Hollywood talent, Red is banking on the star power of homegrown personalities such as Singh to persuade fans to sign up.

"The strategy is to fish where the fish are," says Susanne Daniels, YouTube's global head of original content. Daniels, a teen TV programming veteran—she ran the WB Network from 1994 to 2003 and oversaw the hits *7th Heaven* and *Dawson's Creek*—inherited the original-programming initiative when she started at YouTube last summer. "We want to work with top YouTube stars," she says, "and differentiate their programming so that it was clearly something they'd not normally do for their own channel."

Red went live in October. In addition to *Unicorn*, the original shows include *Scare PewDiePie*, an adventure series starring Swedish YouTube sensation Felix Kjellberg, and two movies, *Dance Camp* and *Lazer Team*, from Web video production companies **AwesomenessTV** and **Rooster Teeth**, respectively. Several more programs are slated to premiere by mid-March. Budgets range from a few hundred thousand to several million dollars.

In 2012, YouTube announced plans to spend several hundred million dollars to create channels for Hollywood stars and major media brands to convince customers and advertisers that YouTube was better than TV. YouTube left these channels to fend for themselves, with mixed results. This time, the company is more hands-on. For *Scare PewDiePie*, YouTube helped Kjellberg develop and produce the 10-episode series. It's paying to distribute and market *Unicorn*, produced by former MTV Chief Executive

Officer Judy McGrath and her digital content company, **Astronauts Wanted**, and alien sci-fi comedy *Lazer Team*. The latter, the first feature film Rooster Teeth produced, opened in some theaters for a couple of weeks in January via Tugg, a website where fans request local screenings of films they like. It's now available exclusively online at YouTube Red.

YouTube hasn't said how many customers it hopes will sign up for Red. With more than 1 billion monthly users, it doesn't need to convince everyone, says Rich Raddon, co-CEO of Zefr, a software company that has helped pay-video services advertise on YouTube. Attracting even 10 percent, about 100 million people, would give it a bigger paid-subscriber base than Netflix and all cable TV providers.

Red also includes Google's streaming music service and ad-free videos. Ultimately, though, it's the quality of the programs that will persuade people to pay. "YouTube has this unique opportunity to build a subscription business," Raddon says. "This platform where anyone can upload videos has taken 12 years to build, and now they have to figure out how to subsidize the right kind of shows to drive payments." —*Lucas Shaw*

The bottom line YouTube has rolled out original programs, hoping to turn many of its more than 1 billion users into paid subscribers.

Autos

Self-Driving Cars' Big Roadblock: Winter

▶ **"Snow smoke" disables sensors robot vehicles need to navigate**

▶ **"When it starts building up, you just lose functionality"**

In Jokkmokk, a hamlet just north of the Arctic Circle in Sweden, **Volvo Cars**' self-driving XC90 sport-utility vehicle met its match: frozen flakes that caked on radar sensors essential to reading the road. Suddenly the SUV was blind. "It's really difficult, especially when you have the snow

smoke from the car in front," says Marcus Rothoff, director of Volvo's autonomous-driving program. "A bit of ice you can manage. But when it starts building up, you just lose functionality."

So Volvo engineers started moving the sensors. And next year, when Swedish drivers take their hands off the wheel of leased XC90s in the world's first public test of fully autonomous technology, the radar will be nestled behind the windshield, which wipers keep clear of ice and snow.

As automakers race to get robot cars on the road, they're encountering an obstacle very familiar to humans: Old Man Winter. Simple snow can render the most advanced computing power useless. That's why companies including Volvo Cars, owned by China's **Zhejiang Geely Holding Group**, and **Ford** are revving up efforts to prevent snow blindness.

With about 70 percent of Americans living in the snow belt, learning to navigate in rough weather is crucial for driverless cars to gain mass appeal and realize their potential to reduce traffic congestion and road deaths. "If your vision is obscured as a human in strong flurries, then vision sensors are going to encounter the exact same obstacles," says Jeremy Carlson, an autonomy specialist at IHS Automotive.

Driverless cars "see" the world around them using data from cameras, radar, and lidar, which bounces laser light off objects to assess their shape and location. High-speed processors crunch the data to provide 360-degree detection of lanes, traffic, pedestrians, signs, stoplights, and anything else in the vehicle's path. But snow can shroud cameras and cover the lane lines they must detect to keep a driverless car on course. Lidar also is limited because the light pulses it emits reflect off flakes, potentially confusing even a modest curtain of falling snow with an object to avoid, causing the car to hit the brakes.

Radar, which senses objects by emitting electromagnetic waves and has been used since 1999 in adaptive cruise control to maintain a set distance from other vehicles, is better. "If everything else fails, I can follow the preceding traffic," says Kay Stepper, vice president and head of the automated driving unit at German parts supplier **Robert Bosch**. "The radar is the key

Singh

element of that because of its ability to work robustly in inclement weather."

Ford, which declined interview requests, says it might have found a solution to snow-blanketed lane lines, according to a press release. The automaker is scanning roads in advance with lidar to create high-definition 3D maps that are more accurate than images from global positioning satellites, which can be 10 meters off.

Ryan Eustice, an associate professor of engineering at the University of Michigan who's worked with Ford on the problem since 2012, says they've also found a way to filter the "noise" created by falling snowflakes. The filtered data combined with information from the 3D maps allow the car to pinpoint its location to within "tens of centimeters," he says. "That's high enough accuracy that we know exactly what lane we're in."

Still, lane lines can become meaningless in a snowstorm, as human drivers blaze their own trails in the ruts created by vehicles in front of them. The solution may be artificial intelligence, says Danny Shapiro, senior director of automotive at processor maker **Nvidia,** which says its latest computer brain can perform as many as 24 trillion "deep learning operations" per second. Deep learning trains a robot car, based on millions of miles of driving experience loaded into its software and continually updated. So in a snowstorm, the car will know it should follow the ruts rather than stay within the lane lines. "It's very similar to how a human learns, by experience," Shapiro says.

Also like a human, a driverless car can get disoriented in a whiteout. "There's been a lot of hype in the media and in the public mind's eye" about the technology for self-driving cars "being nearly solved," Eustice says. "But a car that's able to do nationwide, all-weather driving, under all conditions, that's still the holy grail." —*Keith Naughton*

The bottom line About 70 percent of Americans live in the snow belt. So carmakers are trying to develop driverless vehicles that can "see" in snow.