

Rohan: Products would keep 'old' from being a dirty word

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If 40 is the new 30, and 50 the new 40, and 60 the new 50, and 70 the new 60, when — if ever — does a person become “old”?



Courtesy Of MIT

MIT's AgeLab is developing products, such as a driving simulator, to help boomers adjust to aging.

“Have you ever noticed that when we talk about aging, it’s always about them?” Joseph F. Coughlin said, while moderating a panel discussion at the MIT Deshpande Center’s CQ 2009 IdeaStream Symposium in Boston last Tuesday. “How old is old? I think the classic answer I’ve seen is, it’s 20 years older than whoever answers the question.”

Coughlin, whose topic was “The Final Frontier: Technologies for an Aging Population,” is the 47-year-old director of the Massachusetts Institute of Technology AgeLab, which develops new ideas, technologies and products to help baby boomers adjust to life as they — oops, we — get older.

His lab’s challenge: “How well do we meet the fact that every seven seconds, a baby boomer’s turning 63 in this country alone?”

One hundred years ago, the life expectancy was 47, but today, we can expect to live into our 70s — and many will live well beyond that, says Coughlin, whose goal is to help boomers continue to work, play, learn and remain engaged and independent for as long as possible during those extra three to four decades of life.

In development

Among the AgeLab products in development are electronic “pets” (or “Pharm Animals”) that remind people to take their medications; information navigation systems to help older adults, their adult children and caregivers find and evaluate information about health and finance; and a Palm-Pilot-like device that would scan grocery items and alert people about foods too high in fat or salt.



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The AGNES suit is another of the lab's creations.

There's also the AGNES (Age Gain Now Empathy System) suit, a technologically rigged and padded jumpsuit to help young designers, students and engineers better understand what it feels like to "have a diminished function," so they can design products that are easy for older people to use, Coughlin says.

And a major component of AgeLab's work involves driving. Coughlin, a South Jersey resident who has a doctorate in public policy from Boston University, joined MIT's School of Engineering in 1997, after a decade as a transportation specialist at a consulting firm. There, he developed an interest in the needs of aging drivers — which led him to found AgeLab in 2000.

Surrendering one's car keys represents a serious loss of independence. And while Coughlin concedes that there probably comes a point when someone should no longer drive, he views the car as "a piece of assistive technology" that can be adapted to extend the driving years, by compensating for age-related deficits like diminished reflexes and night vision.

"Older drivers tend to be safer drivers, because they self-regulate. They don't drive at night, they tend to pull themselves off [the road] under bad traffic conditions," Coughlin says. "Well, what would happen if the car could help you to self-regulate ... to say how you're doing stress-wise or physiologically, or with respect to conditions on the road? The car would [to] not only inform you about how you are driving," but maybe change the car's performance in response?

AgeLab — which I hope to actually visit in the coming year — recruits aging (heavily monitored) volunteers to take "test drives" in "Miss Daisy," a red Volkswagen Beetle/driving simulator that's loaded with about \$1 million worth of digital electronics, parked in a laboratory. (Monitors measure the drivers' breathing, heart rate, and eye movements.)

And outside AgeLab's Cambridge offices, a fully functional (and specially outfitted) black Volvo SUV "Smart Car" enables Coughlin's crew to do real-world testing.

The goal, he says, is to enable older people to “go to visit a grandchild, go to work, go to a shop, buy a Bose, whatever it might be — all those great little things that we call life.”

Finding a market

OK, for future information, where can I buy my Smart Car?

There's the rub. There is an “innovation gap,” Coughlin says. Despite the fact that there is a large aging market with clear and major needs, “there's not been one single device that we can declare a great success.”

It's not just things that AgeLab (whose corporate partners have included Proctor & Gamble, Johnson & Johnson and Motorola) has been developing, but even existing products as widely known as personal emergency response systems (such as Lifeline pendants), which allow people in crisis to call for help. The product's penetration rate in this country is 2 percent to 3 percent, Coughlin says, adding, “If a technology that's been around for 30 to 40 years, that's easy and cheap is not moving, how are we going to address the adoption of the ‘gee whiz’ that's coming? How are we going to excite and delight the next generation of older consumers?”

Part of the problem is that in this youth-obsessed culture, products for the old have a stigma.

“So many of the technologies to help our older people scream ‘I'm old. I'm frail. I need help,!’” said panelist Dr. Katherine Hesse, medical director of MGH Senior Health at Massachusetts General Hospital.

Conversely, a number of patients have told her that they use Wii, the popular Nintendo video game that allows people to simulate playing, for example, tennis. “They can't get out in the winter to exercise, so they're using the programs in their homes to keep active,” Hesse said.

If you build something youthful and fun, they will come.

Down the road, Coughlin says, we may see robots that provide “everything from service to companionship” — a potential boon to baby boomers (32 percent of whom already live alone, he says).

Coughlin believes boomers will narrow the “innovation gap,” for several reasons. “They've been so self-centered that they're likely to scream louder than our parents would have ever done before,” he says. “Their numbers are commanding, and even with the downturn in the economy, they have far more disposable income than any previous generation of older adults.

“For the past 63 years, this country has only focused on them as young. Well, they ain't young anymore, but they are youthful.”

Definitely not yet old.

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