

Segway

problems	frequency cited	notes
too expensive	12	>\$3000, is 3x more than a consumer product should cost, In this price range the Segway is competing with small cars or scooters
no infrastructure	10	Where can you park it? How do you charge it? Do you use it on roads or sidewalks? our cities are designed for pedestrians or speedy vehicles
expectation too high/inflated expectations	7	described as future of transport, PR exposure overdone
no target market/niche/ tried to address too many markets (corporate, recreational, commuters)	8	no compelling need for anyone to buy it, The consumer groups of Segway can be classified into pure recreation, fun transportation (such as tourists, shoppers, golfers), and professional application by the police, postmen, people in airports and warehouses (Berchicci, 2006). The first group is where the major drawback in sales was seen.
prohibitive regulation	7	banned from sidewalks and roads because it did not fit any existing categories
no user feedback and iteration	7	no iteration based on market expectation and need
dorky/uncool/goofy	9	shout abuse from their cars: "Too lazy to walk, ya fuckin homo?" you look <i>smug</i> . You don't seem to be working hard enough. Someone riding a motorcycle isn't working any harder. But because he's sitting astride it, he seems to be making an effort.
too big/clumsy	6	doesn't fit on public transportation
too heavy	4	80 lbs, 2 people need to lift it

limited range		5	11 miles, called its achilles heel, had to swap batteries every hour
no training		4	can't teach if sold online
no business/manufacturing partners		4	did not enlist help of people who have expertise. went at it alone instead
preposterous valuation after 1st funding round		1	\$650 mil, with Dean owning 75%. faces longer odds of success when it seeks a further round of funding. raising money for a company that doesn't have near the revenue to justify a valuation north of \$500 million is difficult
no experience manufacturing, selling, and distributing products		4	
no sales and marketing lead		4	no sales department
no protection from weather		2	cant carry umbrella while riding
difficult to swap batteries		1	You pull out eight bolts, put in two new batteries, tighten up the eight bolts, and continue on your route.
failure to secure industry buyers		1	postal service, police dept only bought handful
electric bikes/bikes/scooters better alternative		5	cheaper, and they don't have batteries that run out of juice
failure to adopt new technology		5	not ready to abandon either their cars or bicycles, economy not conducive
dangerous/unsafe		10	danger to pedestrians that has no place on his city's sidewalks, cant stop in time, People hurt on the self-balancing devices are more likely to be admitted to the hospital, particularly with traumatic head and face injuries, than pedestrians struck by cars

san francisco banned segway from sidewalks		4	
distribution problem		5	Because the unit required some training, it needed to have a reliable customer interaction point. If a retailer like Sears, Costco, Home Depot, or Target could have been the key points of customer contact, the product could have been successfully sold to a wide market place. Instead Amazon was the vehicle for the general public.
failure to understand target market/customers/mistaken target market/no market research		10	mistake was a focus on those in the postal and security fields which could be reached by direct marketing. The problem was that postal workers needed both hands while walking and security workers preferred a bike that did not have a limited range.
no value proposition/poor communication of value added/no demand		12	focus was on the machine's technology, not its value for the market, how it benefited the user
insurance liability coverage unclear		5	Owners are not required to provide proof of financial liability insurance for the Segway. Insurance companies have several options about how they can insure Segway, according to the Insurance Information Institute. As a result, some insurance companies may sell an umbrella policy stemming from a standard homeowners policy that will cover the Segway. Others companies, the Insurance Information Institute said, may choose to offer a general policy that covers small motorized vehicles that would be separate, like an auto policy.
complex/difficult to use		2	
no equity sharing/ stock option		1	preferred a traditional incentive system based on salaries and occasional bonuses.
scaling without proof of sales		3	prior to selling a single product, Kamen made a vast investment in leasing a brand new 77,000 square foot factory

<p><i>Inability to Facilitate Diffusion to the “Early Majority” cluster</i></p>		<p>1 http://strategiesbeyondmarkets.wordpress.com/2011/11/28/segway-how-an-innovation-capable-of-changing-the-world-fell-in-a-chasm/</p>
<p><i>Failure to “Cross the Chasm” Between the “Early Adopters” and the “Early Majority”</i></p>		<p>1 http://strategiesbeyondmarkets.wordpress.com/2011/11/28/segway-how-an-innovation-capable-of-changing-the-world-fell-in-a-chasm/#comment-283</p>

things they did right	frequency cited	note
huge market, could replace walking	2	6 billion people can use it
awesome inventor and team (dean kamen)	7	
very well funded	5	\$176mil initial investment
high profile backers	11	John Doerr, Jeff Bezos, Steve Jobs predicted that it would have as great an impact as the personal computer
Massive media attention	12	
riding is a lot of fun, fluid	7	
laws changed to accomodate segway thanks to heavy lobbying	4	32 states and the District of Columbia had changed their laws to accommodate the Segway, though in some states there's a speed limit of 8 miles per hour," roughly twice the rate of a fast walker. Most of the remaining 18 states either don't need to change their laws or held no legislative session in 2002. Action in several key states, including New York and Massachusetts, is still pending
no protruding edges to poke people	1	
brilliant technology	7	
attracted a loyal following	2	There were Segway Fest event to celebrate the Segway lifestyle
start a sport around the device	2	Segway Enthusiasts Group in California introduced 'Segway polo' as a team sport. Segway polo is similar to horse polo, except that instead of playing on a horseback, each player rides a Segway on the field. The sport is getting more and more attention
started Segway Enthusiasts Groups (SEGs)	3	educate the public, share information, stories, and photos about the ownership experience, and promote safe and responsible gliding. Within one year more than 1400 people joined the forum.

good for other applications		4 in Australia, they've used Segways as the basis of urban warfare training robots. Increasing the range of a foot patrol is very valuable for security applications. There the price tag, where the device is used through multiple shifts and without rest, is easier to justify. Armies and municipalities can digest the \$5000 price. To them, that's cheap.
-----------------------------	--	---

Highest cited reasons for failure (in descending order, from frequency of 12 to 8)

1. Too expensive
2. Poor communication of value proposition
3. Lack of infrastructure
4. Dangerous/unsafe to be ridden
5. Poor market research/failure to understand market
6. Looks dorky
7. No target market/niche

Articles/Papers on Segway

fucking awesome analytical piece on segway's failure - http://archive.wired.com/wired/archive/11.03/segway_pr.html

<http://www.paulgraham.com/segway.html>

<http://www.prophet.com/blog/aakeronbrands/30-why-did-segway-fail-or-did-it>

<http://woolmilk.wordpress.com/2012/05/03/segway-inc-analysis-of-an-innovation-that-failed-to-commercialize/>

<http://strategiesbeyondmarkets.wordpress.com/2011/11/28/segway-how-an-innovation-capable-of-changing-the-world-fell-in-a-chasm/>

<http://www.geek.com/news/segway-banned-from-san-francisco-sidewalks-548094/>

http://www.nbcnews.com/id/39382682/ns/health-more_health_news/#.UobnYF6oZuY

<http://www.cbsnews.com/news/segways-corporate-savior-drives-off-cliff-but-didnt-take-company-with-him/>

<http://www.quora.com/Segway/Why-did-the-Segway-fail>

http://www.innovationmanagement.se/2012/05/02/a-lesson-in-innovation-why-did-the-segway-fail/?utm_source=Subscribers+InnovationManagement.se&utm_campaign=47d9da44ed-This-week-in-im-april-10-2012&utm_medium=email

http://phillips.blogs.com/mwa/2004/03/segway_the_righ.html

http://issuu.com/ffurtado/docs/segway_business_model

<http://smallbusiness.chron.com/four-reasons-new-product-fails-18004.html>

<http://hbhblog.blogspot.com/2012/10/segway-and-patent-fail.html>

<http://harvestzhang.com/2012/09/19/ipad-or-segway-accounting-for-the-dork-factor/>

legislative bill on e skateboards -

<http://blog.sfgate.com/stew/2014/03/11/california-bill-would-pave-way-for-electric-skateboards/>

http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB2054

amended law in cali - <http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml>

we can go step by step. first can be for younger audience, second can be for some other target group. maybe the postal service, older people

gotta first target the early adopters as they are the most open to new ideas and innovations. they will spread the word as they are the cool ones, the ones with the most influence and clout. we have to position ourselves. if you try to cater to everyone, you will end up attracting none in particular. people are too different. trying to cater to everyone is impossible.

average commuters aren't early adopters. we HAVE to target early adopters. average commuters will pick up if they see cool early adopters pick it up. alternatively, we could say its for everyone but then strategically sell it in places with a high percentage of early adopters. - like extreme sports stores; basically any place that is deemed cool or fashionable.

need to make a financial argument about how much you can save since its electricity. no gas, maintenance

v good article : http://phillips.blogs.com/mwa/2004/03/segway_the_righ.html

people are willing to put up with something moderately useful if its cool as fuck

people are willing to put up with something moderately cool if its fucking useful

need a complementary ecosystem

No man/company can stand alone. Build an ecosystem around your product - like Apple did with App Store and salesforce.com did with App Exchange.

app is absolutely necessary. needs to have a settings menu where the battery life is monitored. it should have smart settings that detects patterns in movement of user and environment and reacts accordingly.

Popularity of bikes:

<http://www.bbc.com/news/magazine-23587916>

<http://ecolocalizer.com/2008/06/16/17-reasons-why-bicycles-are-the-most-popular-vehicle-in-the-world-today/>

Sales Model: Leasing out

Problem: buyers must have good credit history. which might be a problem among younger people

what if MetroPlex had a rechargeable battery that recharged when the device went downhill, thereby maintaining the same speed as going uphill but charging the device at the same time.

gotta study apple, specifically the iPad

one of the biggest problems with electric skateboards is safety. there no way for a car driver to see you at night. need lights, luminescent wear

check sci fi flicks and books to see if there's a method's for riding - new posture