



What Does the Future Hold for Traffic Jams Around Retail Centers?

Session 500

Will Retail Shopping on the Internet Change Travel Behavior?

Observations from John Niles
Global Telematics
Seattle, Washington USA
January 13, 2009



Outline

- How strong will shopping web sites become?
- How large will E-shopping become?
- How will place-based retailers fight back?
- Does E-shopping really help the environment?
- The promise of growing travel efficiency

(Reg, Plus, Slim, Big & Tall, etc.)

Specific Size

Recommend 

Sleeve Length



Fabric



Style



Women's Turtlenecks in Sale

Sort By: 

Items 1 - 12 of 27

12 per page 

[1](#) [2](#) [3](#) 



Easy to choose colors



[Women's Cotton Seamless Neck Turtleneck](#)

\$15.00- \$20.00

Buy 3 or more select tees, polos, turtlenecks or mocks - save \$2.50 each!



[Women's Cotton Mock Turtleneck](#)

\$15.00- \$20.00

Buy 3 or more select tees, polos, turtlenecks or mocks - save \$2.50 each!



[Women's High Mock Cashmere Sweater](#)

Was \$99.50

Now \$49.99

(Reg, Plus, Slim, Big & Tall, etc.)

Specific Size

Show All ▼

Sleeve Length

Show All ▼

Fabric

Show All ▼

Style

Show All ▼

Women's Turtlenecks in Sale

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12 per page ▼

1 2 3 ⋮



This is Land's End site



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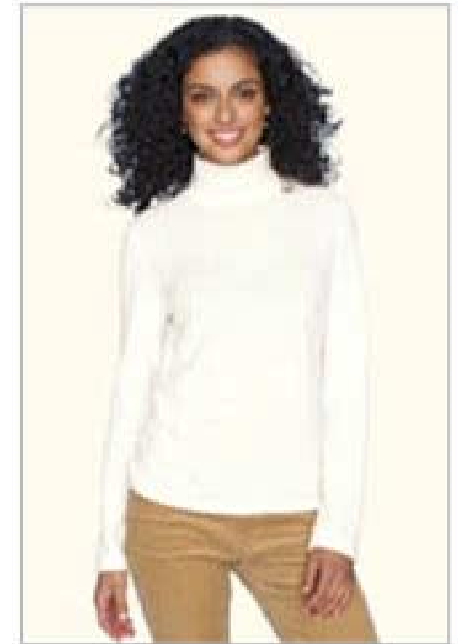
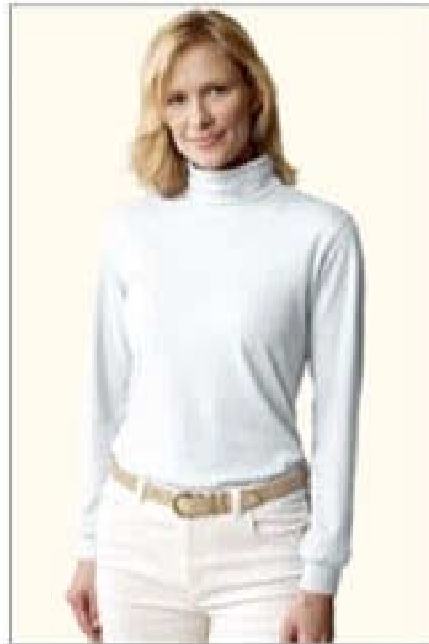
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**Example of a Virtual World:
Second Life from Linden Labs
Web as a place instead of a page!**

You move
around as
an avatar

http://www.shakethepillars.com/images/2nd%20life_001.gif



Outside as well as inside places
for your avatar to explore

http://www.bananaverse.com/art/SLB_Febo8_001.jpg

Second Life, Census of Users, 12/24/08

Residents Logged-In,
Last 7 Days

517,237

Last 14 Days

682,882

Last 30 Days

975,916

Last 60 Days

1,445,444

Total Residents

16,753,320

Source Linden Labs, http://secondlife.com/whatis/economy_stats.php

[illegible]



Sears

Retailers are
experimenting

<http://krisabel.ctv.ca/Canada%20AM/mgrove1.jpg>



Most shopping
so far is for
avatar features

<http://jira.secondlife.com/secure/attachment/14992/avatarskin.jpg>

(Reg, Plus, Slim, Big & Tall, etc.)

Specific Size

Show All ▼

Sleeve Length

Show All ▼

Fabric

Show All ▼

Style

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Will these models.....



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Sleepy

... become avatars in Second life?


New



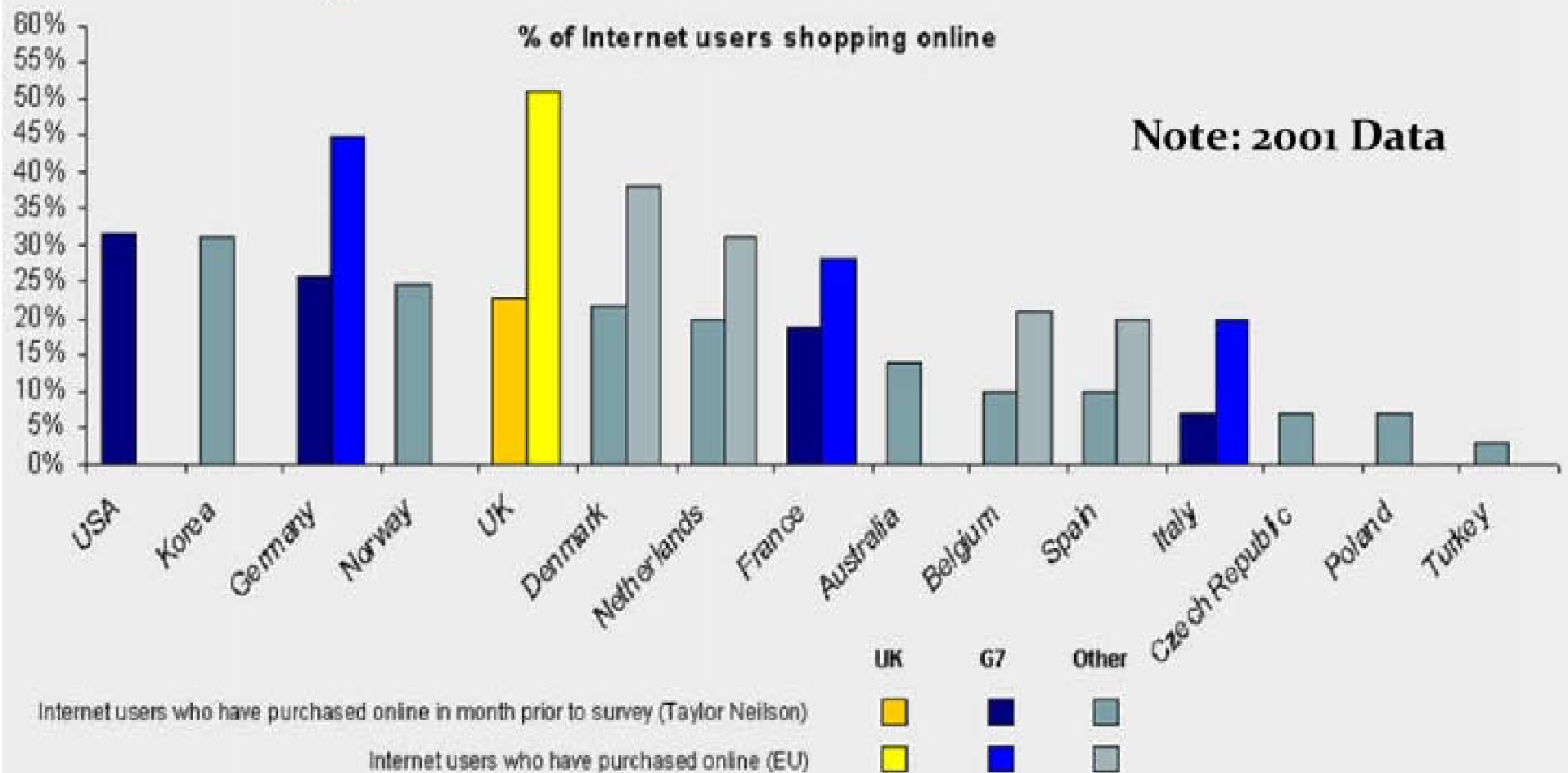
Hear

http://meumeu.files.wordpress.com/2007/12/sleepy_new_year.jpg

A soft evening gown created for comfort
and to impress by Michelle Kariuk

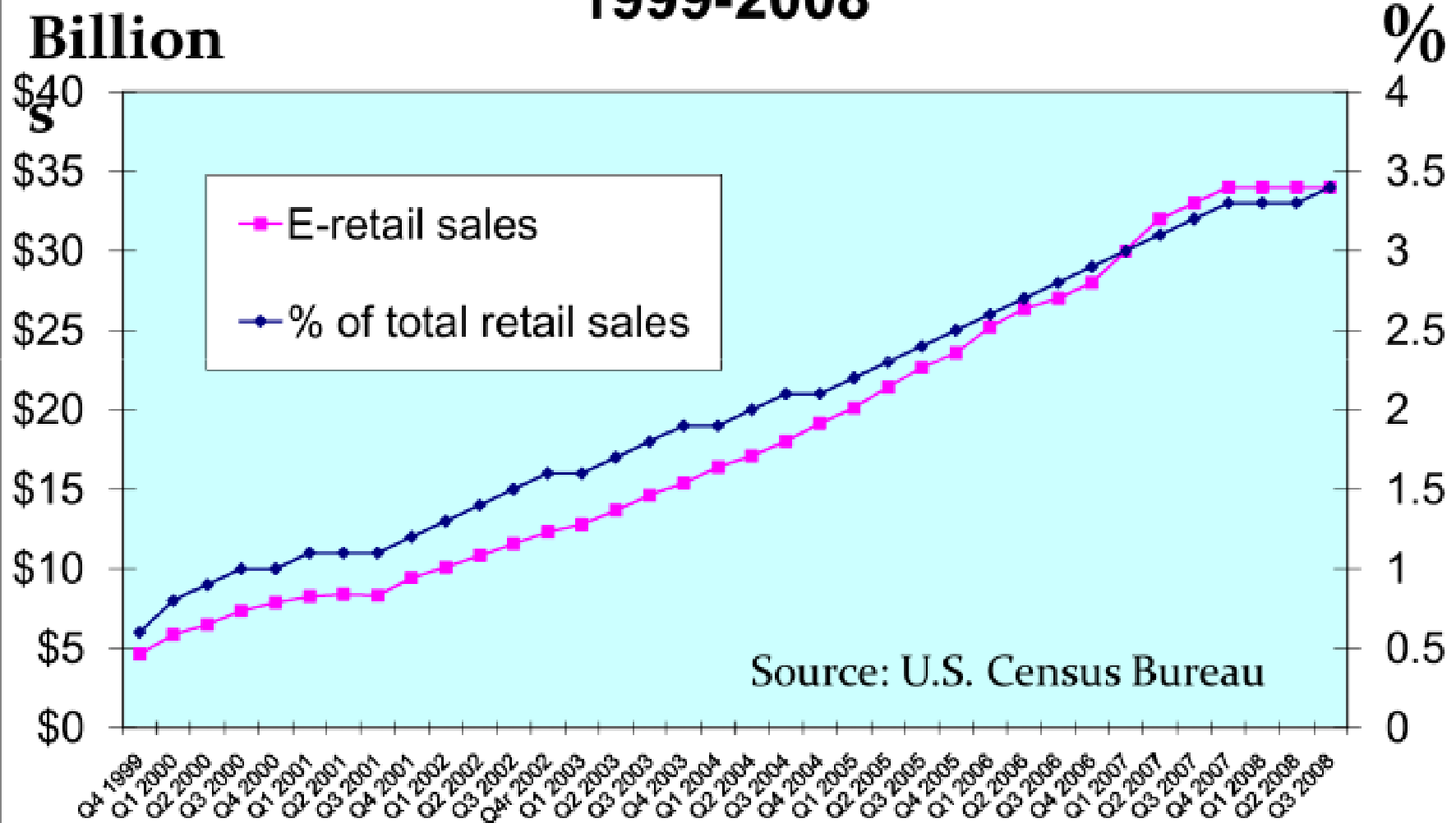
- 
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Large Variations in Online Shopping Among Different Countries

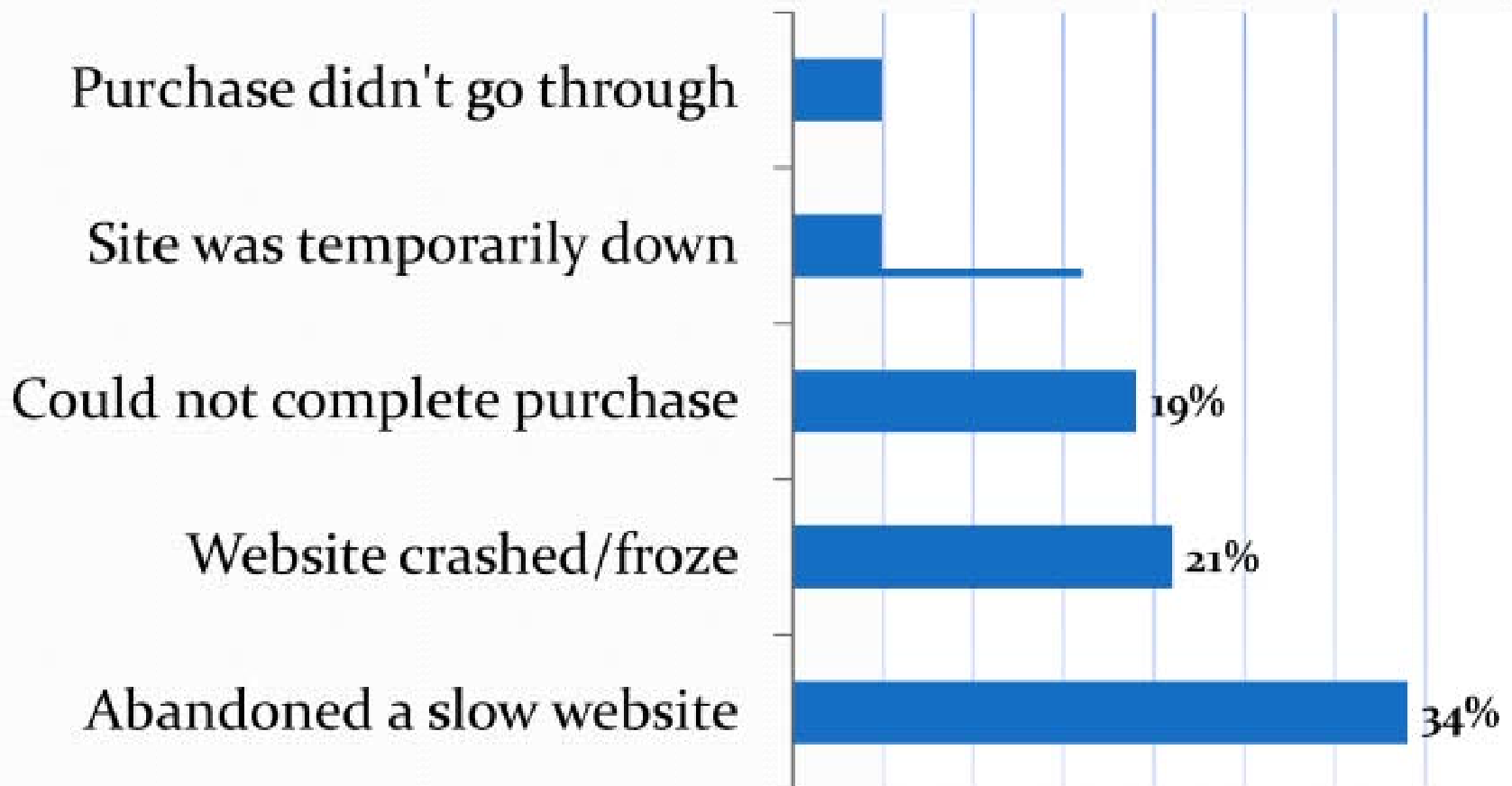


Source: [Euro barometer November 2001](#), [Taylor Nelson Sofres Interactive 2002](#) / [ONS July 2002](#)

U.S. E-Shopping Trends 1999-2008

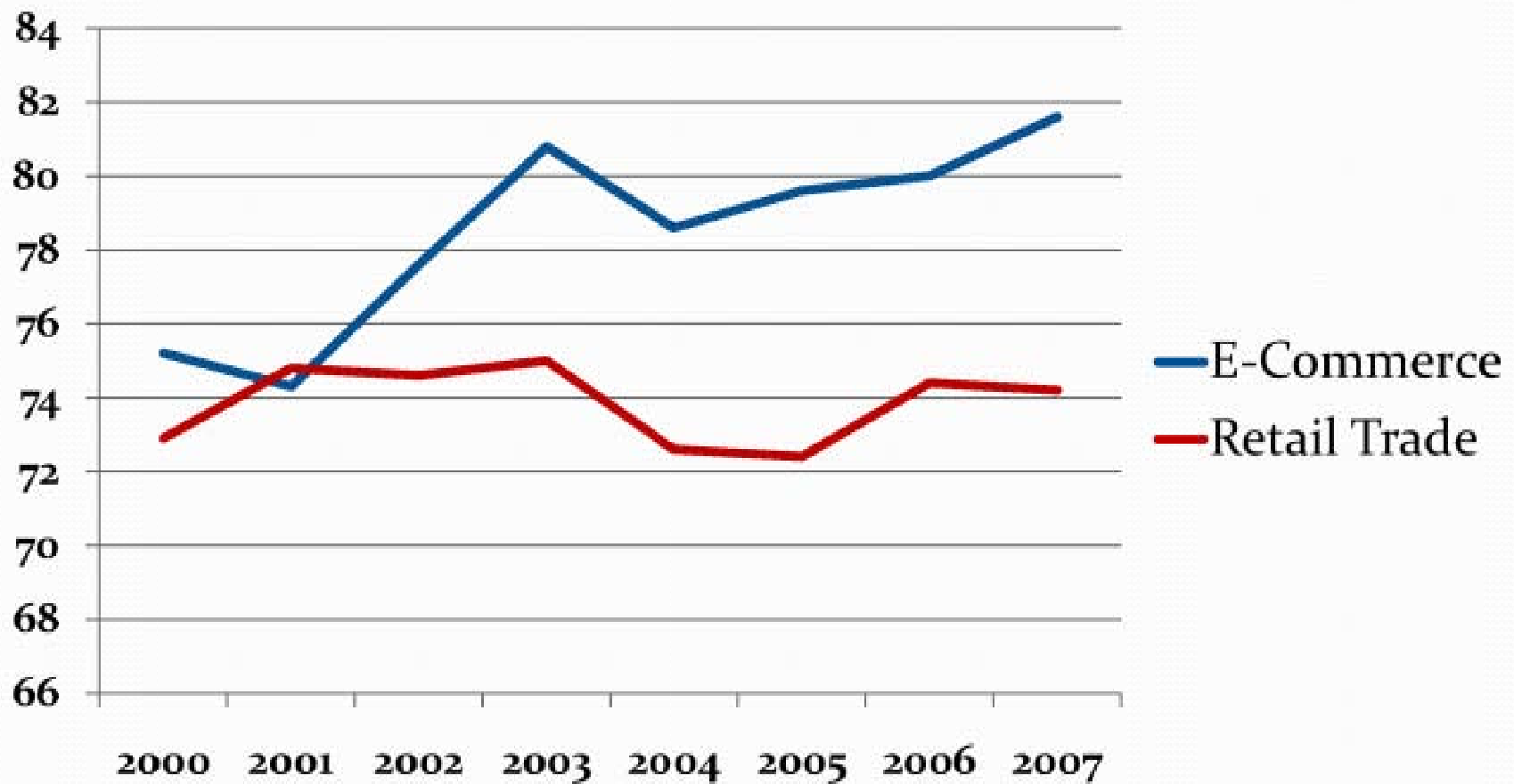


Problems Encountered by Online Shoppers, Holiday Season 2008



Source: <http://www.marketingcharts.com/interactive/one-third-of-online-holiday-shoppers-plagued-by-glitches-7435/>

American Customer Satisfaction Index




Data source: <http://www.theacsi.org/>

Many E-Shoppers Buy Off-line

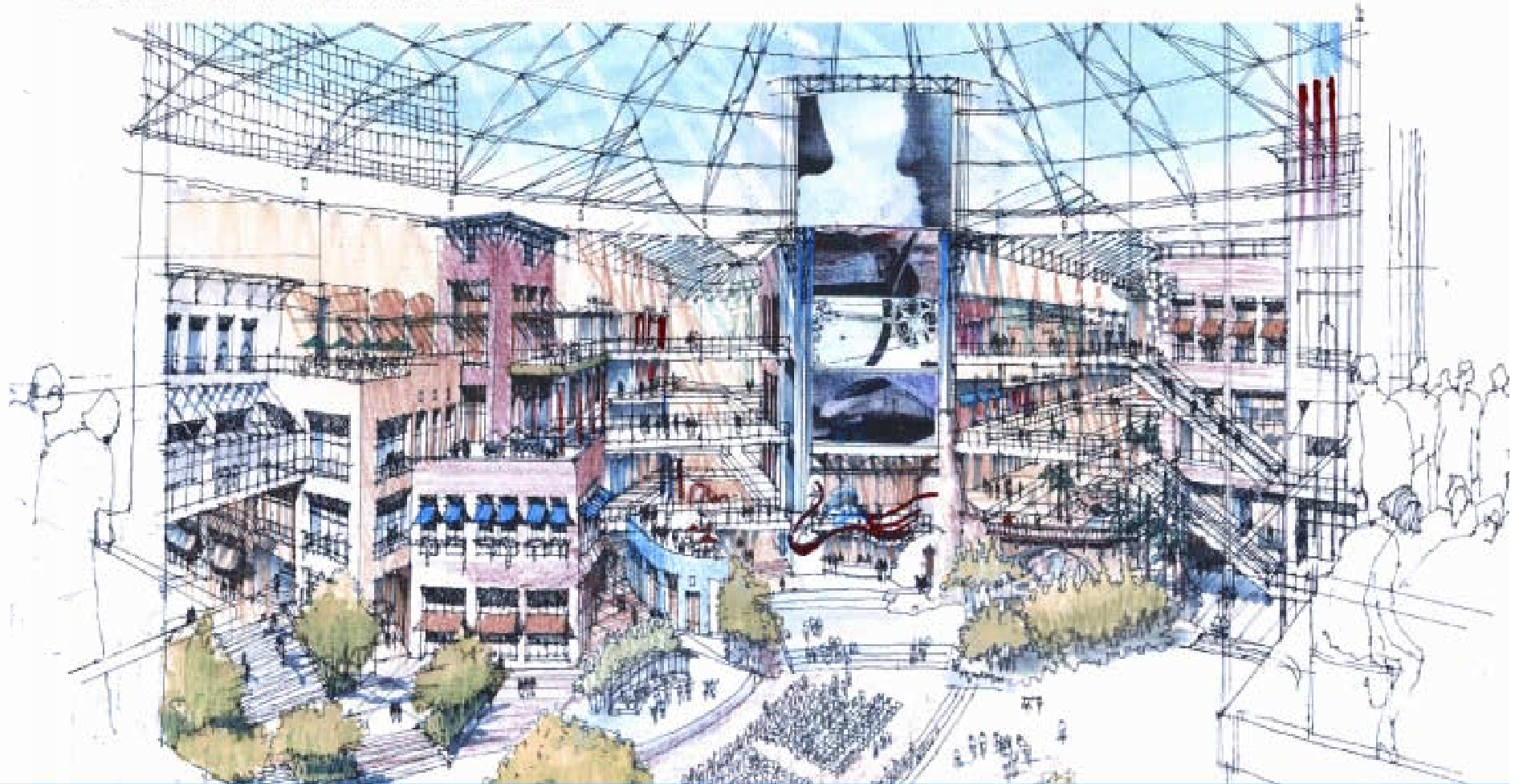
Why



Source: Forrester Research: Understanding US Cross-Channel Shoppers

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Real life: Mall of America, not Second Life

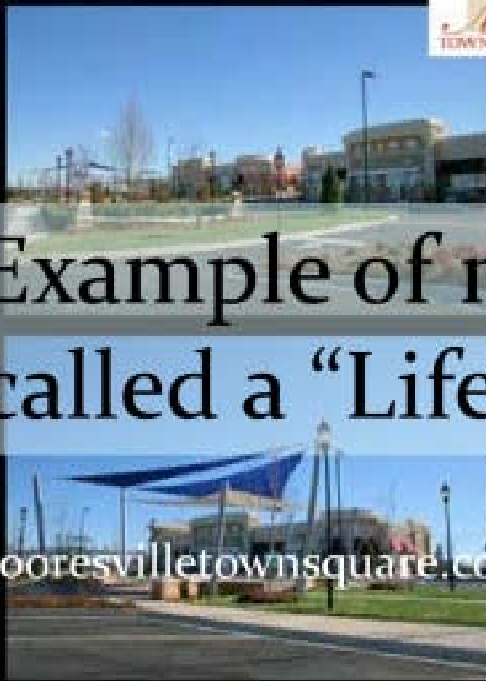


TOWN SQUARE



Malls popular in Asia. This example from Malaysia

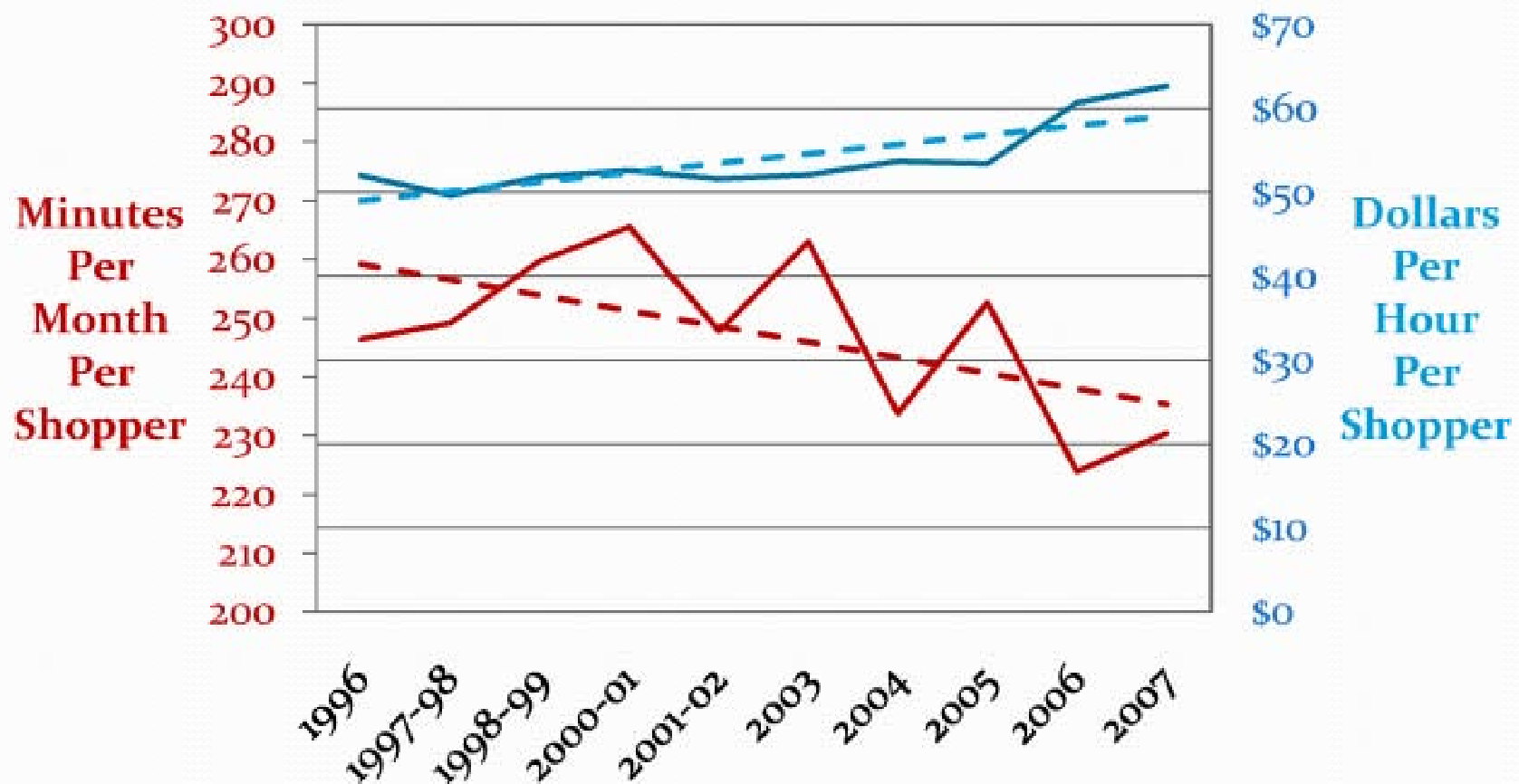
http://farm2.static.flickr.com/1357/559008415_4987f59143_o.jpg



Example of new mall type
called a "Lifestyle Center"

<http://www.moore'svilletownsquare.com/images/MTS-photo-collage-Large.jpg>

Shopping Center Trends



Source: International Council of Shopping Centers

"Cross-Channel Matrix"

- POS
- Web Store
- Catalog
- Email
- Kiosks
- Self-Checkout
- Mobile Phone
- Call Center
- IVR
- Online Chat
- Handheld devices
- Mass Media

Customer Interactions

Product Search
Product Data
Recommendations
Product Availability
Price & Promotions
Purchase/Order Placing
Order Tracking
Privacy & Security
Returns
Customer Service Requests
Coupons

Business Functions

Merchandising
eCommerce
Order Management
Inventory Management
Logistics
CRM/Loyalty
Business Intelligence

Employee Interactions

Product Search
Product Data
Price Lookup
Inventory Lookup
Customer Information
Loyalty Data
Order Placing
Order Tracking
Returns
Customer Service Requests

Courtesy of HCL, Six Essentials for Cross Channel Success

Find it local: All Categories

men's

Search

Washington, DC

[Change Location](#)

Browse by Category

[Home](#) » [Clothing & Accessories](#) » [men's](#) » [Essential knit half-zip](#)



Images may not reflect the actual product color.

[EMAIL A FRIEND](#)

[SHARE](#)

Essential knit half-zip

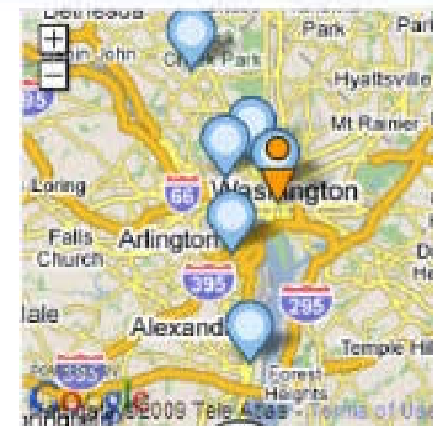
Available Color: Black

Select Size:

1st Choice: -size-

2nd Choice: -size-

(Optional)



10 miles from Washington, DC 20004


6 stores in range may carry this item. Select store(s) to check stock.

Store Name	Price	Distance	Last Known Status
<input type="checkbox"/> Banana Republic 601 13th St Nw # 1, Washington, DC 20005	\$29.99 (reg. \$49.50)	0.38 miles	See Details
<input type="checkbox"/> Banana Republic 1801 Connecticut Ave Nw # 200, Washington, DC 20009	\$29.99 (reg. \$49.50)	1.81 miles	See Details
<input type="checkbox"/> Banana Republic 3200 M St Nw, Washington, DC 20007	\$29.99 (reg. \$49.50)	2.1 miles	See Details

We will verify with the store for you, within 10 minutes!

[Is it in Stock?](#)

or

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Enthusiasts about energy reduction potential from broadband telecommunications are conflicted:

First the good news:

- E-commerce could *reduce consumer driving to stores.*
- E-commerce *boosts digital transmission of video, music, and books/magazines, replacing physical media.*

[Joseph Romm, "The Internet and the New Energy Economy," *Proceedings of the E-Vision 2000: Key Issues That Will Shape Our Energy Future Conference—Supplementary Materials: Papers and Analyses*, Arlington, Virginia: RAND, 2001), p. 137]

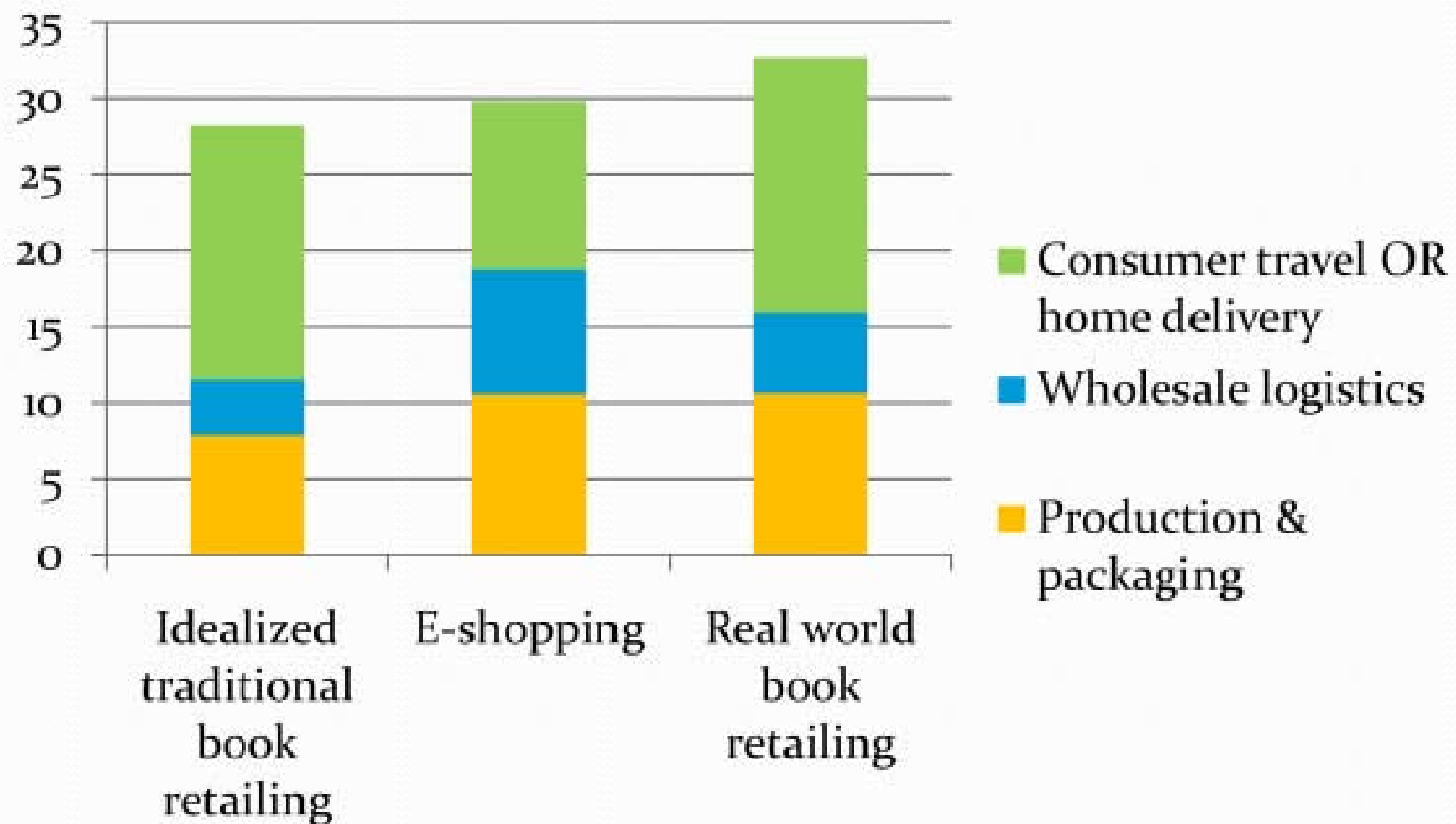


But then advocates for broadband
telecommunications discover
logistics and the world economy





Energy Use Comparison: Bookstores vs E-Shopping



Data source: "Economic and Environmental Implications of Online Retailing in the United States" by H. Scott Matthews and Chris T. Hendrickson

Europeans Focus on Last Mile Package Delivery

Pick-up point	lockerpoint (unattended)	Delivery on appointment	Time slot delivery	Non-timed delivery



Figure 16: DHL Packing station

Source: Bestufs.Net, "Best Urban Freight solutions" Best Practice Update, 2008

E-Shopping Package Pickup at Transportation Hubs




CASCADIA
Transit Solutions
WWW.CASCADIAPROJECTS.ORG

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SHOWING: • Series 2-unit Diesel Multiple Unit (DMU) Train
 • Microsoft "Connector" Service
 • Sun-Tan Express Motor Coach
 • Advance Airport Check-In Service
 • Plug-In Hybrid Electric Vehicle Stalls

• Express Parking
 • Adjustable solar panels (on south side of canopy)
 • Video Conferencing and Telework Center
 • Typical Retail Vendors

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Effects of the Current Economic Climate* on Shopping Behavior of US Adult Consumers, 2008 (% of respondents)

Shopping closer to home

64%

Combining shopping trips

59%

Cutting back on nonessential/luxury items

51%

Making fewer major purchases (i.e., \$100+)

40%

Stocking up more

34%

Researching more products prior to shopping

25%

Buying more online

13%

None of these

9%

Note: n=3,000 ages 18+; *e.g., housing market and gas prices

Source: Vertis Communications, "Customer Focus: Decade of Data" as cited in press release, January 14, 2008

091393

www.eMarketer.com

<http://www.avactis.com/forums/index.php?showtopic=3494>

Online & Mobile Services Support More Efficient Consumer Travel

E-shopping supports Know Before You Go!

- Finding the product closer to home.
- Making multiple purchases in the same location.
- Checking what you want is in stock before going.
- Ordering special requests in advance for pickup.
- Walk/bike/transit/ridesharing to the store increase the importance of advance information

Thank You Very Much!

John Niles

jniles@alum.mit.edu

1-206-781-4475