

Additional Analysis: Composite Attitudinal Segments

Attitudes toward the Internet appear to differentiate different segments of Internet users and nonusers. Additional, in-depth multivariate analysis was used to clearly identify attitudinal segments that meet the following criteria:

- They are clearly differentiated by demographic or socioeconomic characteristics so that an effective reach strategy can be developed.
- They are clearly differentiated by attitudes.
- They are large enough to be meaningful.

Factor Analysis

The analysis entailed the following steps:

- Factor analysis was used in order to reduce the agreement statements into a small number of attitude scores. Input variables included
 - Importance—That all households in Oregon have access to high speed Internet such as DSL or cable?
 - Importance—That you, personally, have access to high speed Internet such as DSL or cable at home?
 - Concerned—You and your family’s privacy while on the Internet?
 - Concerned—The protection of your personal identity while on the Internet, such as having your social security number or bank information stolen?
 - Agreement—There is too much pornography and offensive material on the Internet.
 - Agreement—It is too easy for my personal information to be stolen online.
 - Agreement—The Internet is a valuable source for information and learning.
 - Agreement—It is important for children to learn how to use the Internet.
 - Agreement—The Internet is too dangerous for children.
 - Agreement—People can be more productive using the Internet.

This factor analysis resulted in three primary dimensions and corresponding scores for each individual respondent:

- Internet Value Positive Score
- Internet Risk Assessment Score
- Data Privacy Concern Score

Dimension			
Attitude	Internet Value Positive Score	Internet Risk Assessment Score	Data Privacy Concern Score
Internet is a valuable source for information and learning.	.716		
People can be more productive using the Internet.	.685		
It is important for children to learn how to use the Internet.	.662		
It is important that all households in Oregon have access to high speed Internet such as DSL or cable.	.636		
It is important that you, personally, have access to high speed Internet such as DSL or cable at home.	.589		
There is too much pornography and offensive material on the Internet.		.773	
The Internet is too dangerous for children.		.734	
It is too easy for my personal information to be stolen online.		.721	
I am concerned about the protection of my personal identity while on the Internet, such as having my social security number or bank information stolen.			.917
I am concerned about my and my family's privacy while on the Internet.			.901
<i>Shown are factor loadings which indicate the extent to which a statement is correlated with the overall construct.</i>			
<i>Base: All Respondents</i>			

Analysis of these scores across different demographic segments surfaces distinguishing demographic or socioeconomic characteristics.

Figure 2: Internet Attitude Scores by Gender

Though men and women are equally positive about the value of the Internet, women are much more likely to be worried about the potential risks in using the Internet and data privacy.

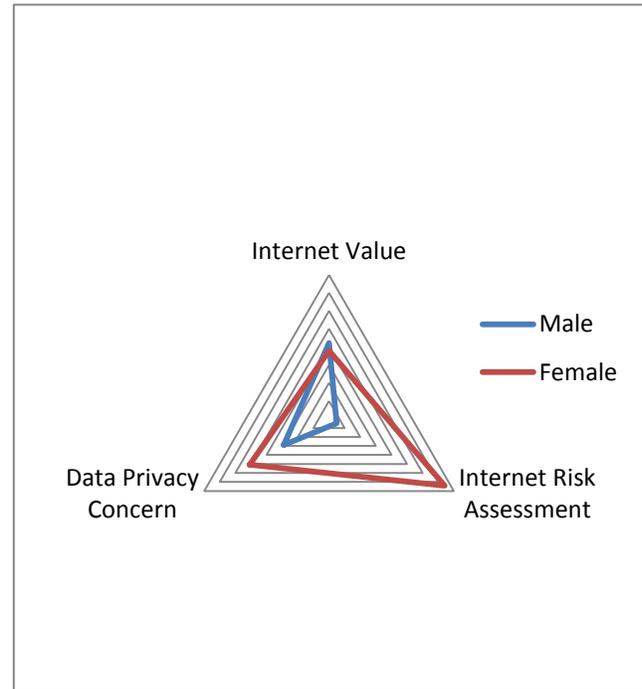


Figure 3: Internet Attitude Scores by Age

Older respondents (65 or older) stand out in their concerns about the risks when using the Internet and the low value they place on the Internet generally.

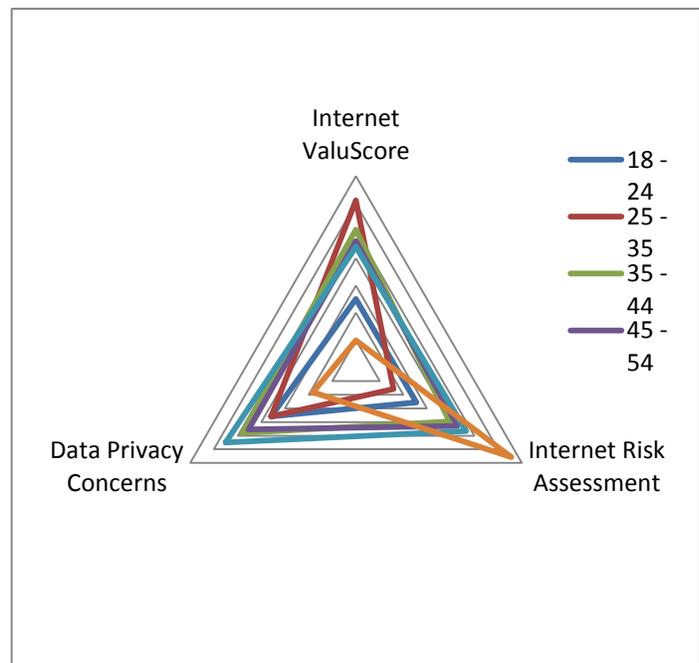


Figure 4: Internet Attitude Scores by Race

In general, nonwhite respondents may be differentiated on all three dimensions.

- Asian and Pacific Islanders and African Americans rate Internet value more highly.
- Hispanics are the most concerned about offensive material.
- African Americans are the most concerned about data privacy.

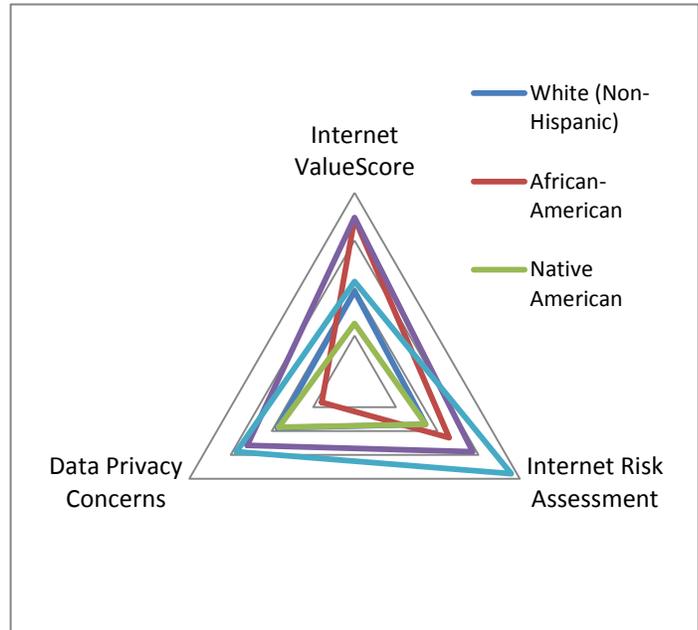


Figure 5: Internet Attitude Scores by HH Income

The value respondents place on the Internet increases with income.

- Concerns about the risks when using the Internet are highest among lower-income households.
- Concerns about data privacy are highest among households with incomes greater than \$75,000. Note that this concern can reflect higher stakes as much as awareness of risk.

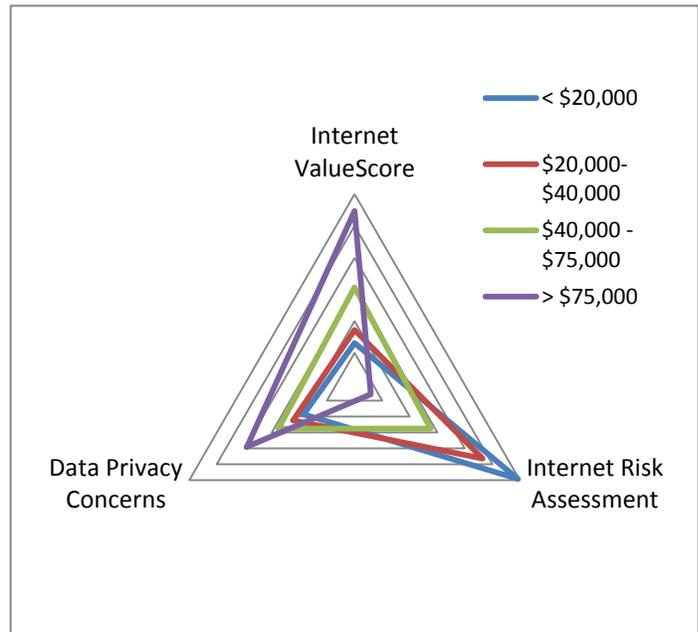


Figure 6: Internet Attitude Scores by Education

The perceived value of the Internet increases with education.

- Those with less education are more concerned with the risks of using the Internet.

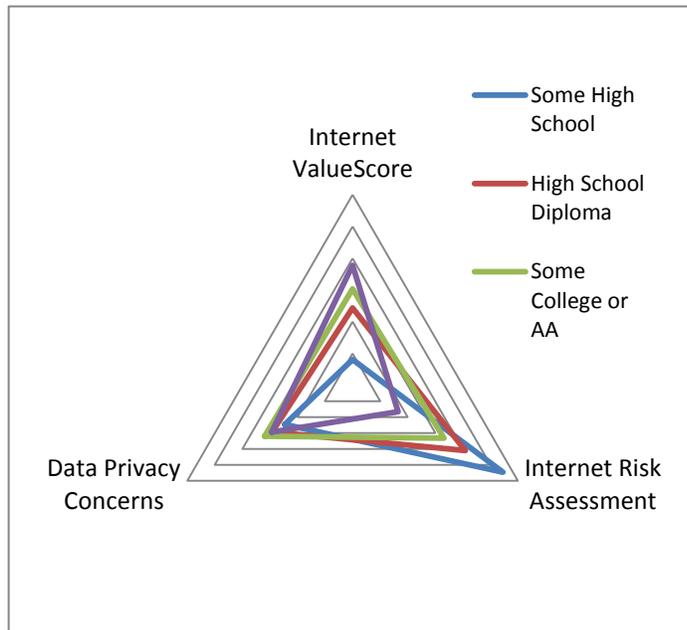
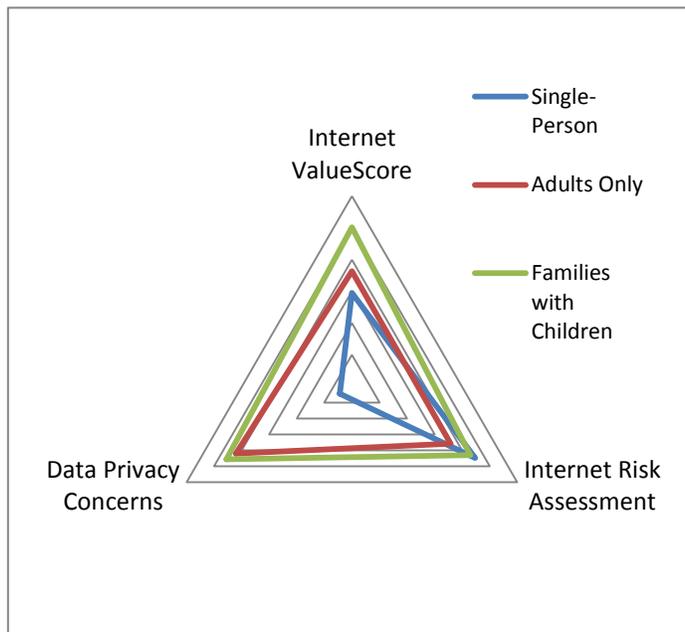


Figure 7: Internet Attitude Scores by Household Type

Those with children in their household see the greatest value to the Internet. At the same time, they are the most concerned about the risks of using the Internet and data privacy.

Respondents in single-person households were least aware of or concerned about data privacy issues; with lower income and education levels associated with these households, they may have the least to lose and thus the question held less meaning.



Cluster Analysis

The second stage in the analysis used cluster analysis to develop an attitudinal segmentation scheme. Several different analyses were reviewed, and a four-segment solution was identified that met the following criteria:

- Large enough to justify potentially different strategies
- Have distinct attitudes
- Are clearly differentiated by demographic and socioeconomic characteristics so that they can be effectively targeted

Attitudinal Segments

Each respondent was assigned to one of the four segments based on the differences in attitudes. The segment names are chosen to reflect their attitudinal profile.

Figure 8: Attitudinal Segment

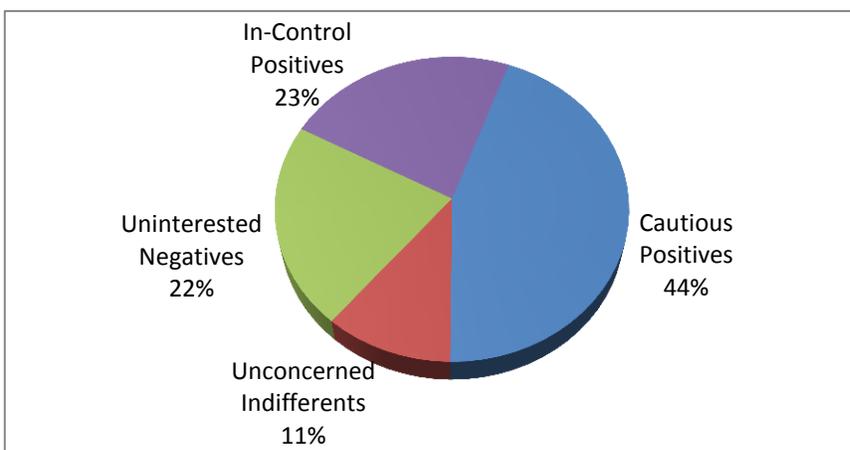
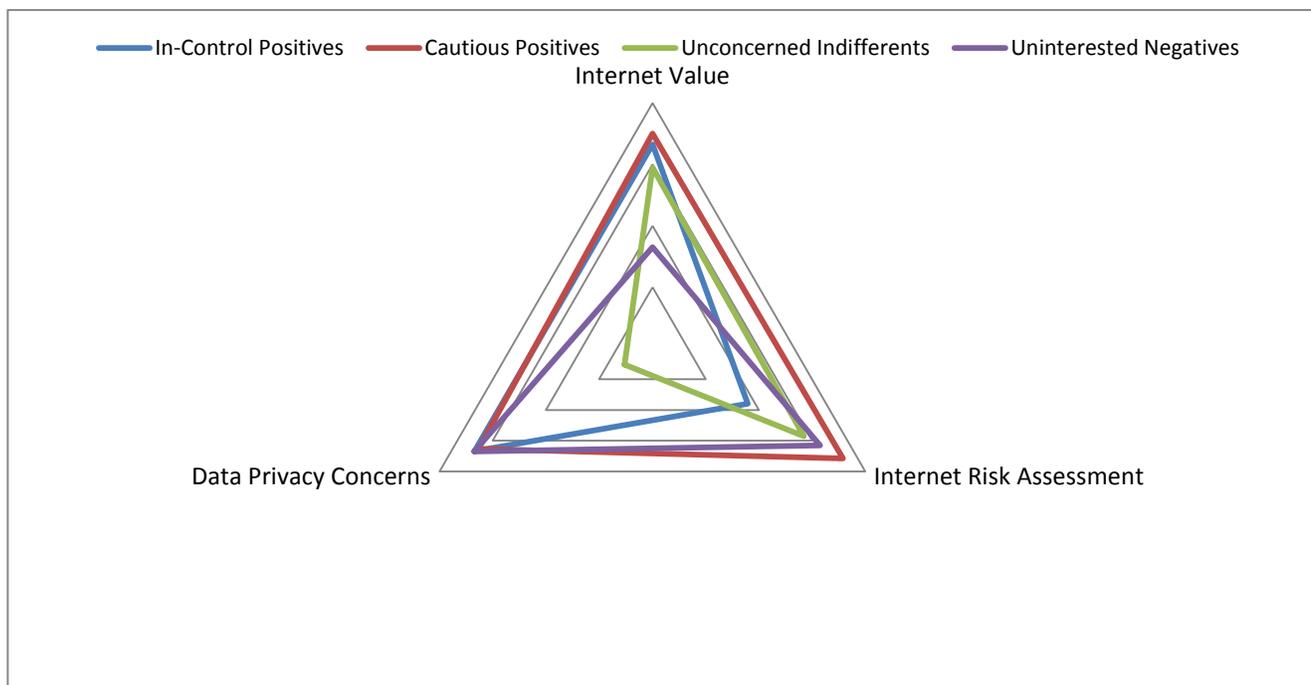


Figure 9: Internet Attitude Scores by Household Type



Characteristics of Attitudinal Segments

<p>In-Control Positives (23% of Adult Oregonians)</p> <p>Internet Attitudes</p> <ul style="list-style-type: none"> • High on Internet Value (.33) • Low on Internet Risk Assessment (-1.21) and Data Privacy Concerns (-.34) 	<p>Cautious Positives (44% of Adult Oregonians)</p> <p>Internet Attitudes</p> <ul style="list-style-type: none"> • Highest on Internet Value (.50) • Highest on Internet Risk Assessment (.58)
<p>Demographics</p> <ul style="list-style-type: none"> • More likely to be men (61%) than women (39%) • The youngest segment—average age is 43 • The most affluent segment—median household income is \$72,863 • Well-educated—53% have college or postgraduate degrees • Predominantly employed (64%) • Predominantly members of adult-only households (57%) 	<p>Demographics</p> <ul style="list-style-type: none"> • More likely to be women (57%) than men (43%) • Predominantly between the ages of 35 and 54 (40%) • Somewhat above-average income—median household income is \$58,010 • Predominantly employed (59%) • Somewhat more likely to be households with children (44%) • Most likely to be nonwhite, notably Asian (6%) or Hispanic (14%)
<p>Geography</p> <ul style="list-style-type: none"> • Highest prevalence in Northwest Coast (25%), Portland Metro (25%), Willamette / Central Coast (25%), and Central Oregon (23%) 	<p>Geography</p> <ul style="list-style-type: none"> • Highest prevalence in Southwestern Oregon (50%)
<p>Broadband Adoption and Use of Internet</p> <ul style="list-style-type: none"> • Highest rate of broadband adoption (96%) • Among those who use the Internet, the highest percentage of Power users (31%) or Heavy users (38%) 	<p>Broadband Adoption and Use of Internet</p> <ul style="list-style-type: none"> • Above-average rate of broadband adoption (87%) • Among those who use the Internet, average percentage of Power users (21%) and Heavy users (31%); above-average percentage of Moderate users (26%)
<p>Unconcerned Indifferents (11% of Adult Oregonians)</p>	<p>Uninterested Negatives (22% of Adult Oregonians)</p>

Internet Attitudes

- Middle of the road on Internet Value (-.05)
- Low on Internet Risk Assessment (-.15) and very low on Data Privacy Concerns (-2.47)

Demographics

- More likely to be men (56%) than women (44%)
- Predominantly between the ages of 18 and 34 (36%) or 65 and older (24%)
- Below-average income—median household income is \$48,954
- Above-average percentage of retired (28%) and above-average percentage of single-person households (16%)

Geography

- Higher-than-average prevalence in South Central Oregon (16% of all adults in this region)

Broadband Adoption and Use of Internet

- One out of five (21%) does not use the Internet at all
- Below-average rate of broadband adoption (70%)
- Among those who use the Internet, an above-average percentage of Light users (29%) but also a high percentage of Power users (26%)

Internet Attitudes

- **Very low** on Internet Value (-1.35)
- Low on Data Privacy Concerns (-.35)

Demographics

- More likely to be women (54%) than men (46%)
- The oldest segment—average age is 48
- The least affluent segment—median household income is \$45,872
- Above-average percentage of retired (27%) and predominantly members of adult-only households (57%)

Geography

- Higher-than-average prevalence in North Central Oregon (27% of all adults in this region)

Broadband Adoption and Use of Internet

- One out of four (26%) does not use the Internet at all
- Lowest rate of broadband adoption (64%)
- Among those who use the Internet, highest percentage of Light users (37%)

Potential for Broadband Adoption among Attitudinal Segments

To determine the potential for broadband adoption within each of these segments, we identified two groups:

1. Nonusers who have used the Internet in the past, those who use the Internet but don't have broadband at home, and nonusers who indicated they are interested in using the Internet, feel it is important for them personally to have the Internet, or feel that Internet has value—Potential Adopters
2. Those who indicate they are not interested in using the Internet—Uninterested Nonadopters

While Oregon has an above-average rate of broadband adoption (compared to the national averages) suggesting that the remaining market consists of late adopters and laggards, there is potential for an additional 12 percent of all adult Oregonians to adopt broadband at home.

Figure 10: Potential for Additional Broadband Adoption

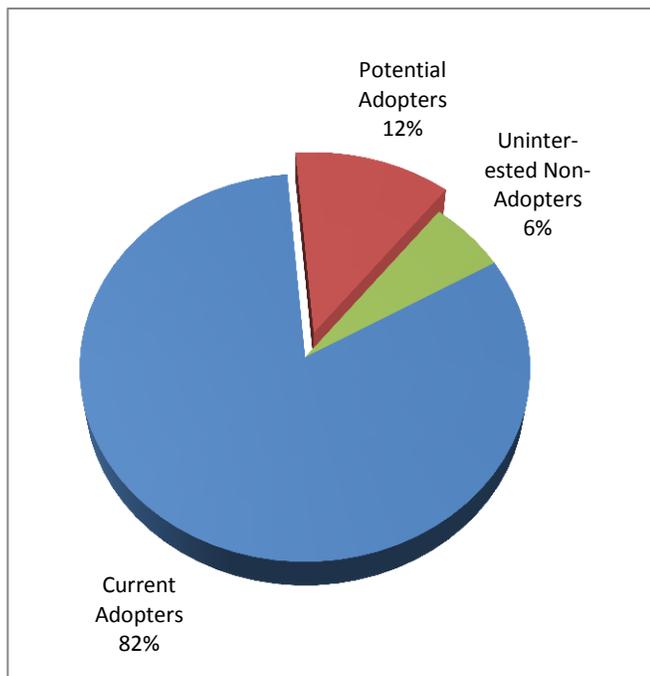
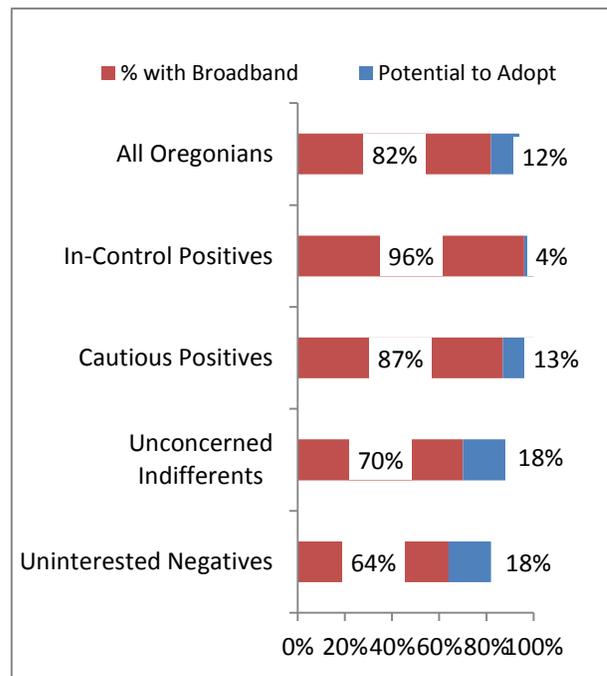


Figure 11: Potential for Additional BB Adoption by Attitudinal Segment



Additional qualitative analysis of the characteristics of Potential Adopters within each attitudinal segment:

	In-Control Positives	Cautious Positives	Unconcerned Indifferents	Uninterested Negatives
Age		18 to 34—primary 45 to 64—secondary	35 to 54—primary 55 to 64—secondary	18 to 34
Gender	Men		Men	Women
Education		High school diploma	Some college	
Employment			Employed full-time	Retired
Home Ownership		Renter		Renter
Use of Internet	78% currently use 37% use at work	44% currently use 41% have never used 51% use at work	56% currently use 29% have never used 38% use at work	44% currently use 38% have never used 34% use at work
Reasons for Not Using the Internet	Not available Use phone	Monthly cost Not available	Not available Access at work or other public location	Monthly cost and activation charges Concerned about using Internet
Ability to set up computers		Would need help		Would need help
Problem areas (if have Internet at home)		Very dissatisfied Connection speed Reliability of connection Ease of use	Dissatisfied Cost of service	
<i>This analysis should be considered qualitative due to small cell sizes. Analysis compared Potential Adopters within each segment to current Adopters and Uninterested Nonadopters</i>				

Table 34: Demographic and Socioeconomic Characteristics of Attitudinal Segments

	In-Control Positives (23% of all Oregonians 678,579 Adults)	Cautious Positives (44% of all Oregonians 1,298,151 Adults)	Unconcerned Indifferents (11% of all Oregonians 324,538 Adults)	Uninterested Negatives (22% of all Oregonians 649,076 Adults)
Gender				
Male	61%	43%	56%	46%
Female	39%	57%	44%	54%
Age				
18–24	12%	11%	16%	15%
25–34	23%	17%	20%	13%
35–44	19%	19%	12%	15%
45–54	18%	21%	17%	16%
55–64	16%	18%	12%	18%
65 and Older	12%	14%	24%	25%
Mean (in yrs)	43.3	46.0	47.2	48.4
Income				
Less than \$20K	7%	12%	13%	17%
\$20–<\$30K	7%	8%	14%	12%
\$30–<\$40K	7%	13%	10%	13%
\$40–<\$50K	8%	10%	14%	14%
\$50–<\$75K	22%	23%	21%	19%
\$75–<\$100K	20%	16%	10%	13%
\$100K or more	28%	18%	17%	12%
Median	\$72,863	\$58,010	\$48,954	\$45,872
Employment Status				
Employed	64%	59%	49%	45%
Student	9%	6%	7%	8%
Retired	14%	18%	28%	27%
Homemaker	0%	0%	1%	1%
Unemployed	13%	17%	14%	18%
Education				
Some high school	1%	6%	6%	8%
High school diploma	19%	27%	25%	28%
Some college or AA	27%	33%	29%	34%
College or postgraduate	53%	34%	40%	30%
Household Composition				
Single Adult	8%	8%	16%	9%
Adults Only	57%	49%	52%	57%
Families	35%	44%	31%	34%
Race/Ethnicity				
White	86%	74%	86%	80%
Nonwhite	11%	11%	9%	7%
Hispanic	3%	14%	4%	12%
Own or Rent				
Own	74%	75%	73%	74%
Rent	26%	25%	27%	26%

Table 35: Prevalence of Attitudinal Segments by Region

	State-wide	NW Coast	Portland	Central Coast	SW Oregon	North Central	Central Oregon	South Central	Eastern Oregon
Cautious Positives	45%	45%	44%	43%	50%	44%	45%	46%	45%
Unconcerned Indifferents	11%	12%	10%	12%	12%	9%	10%	16%	13%
Uninterested Negatives	22%	18%	21%	20%	24%	27%	22%	23%	26%
In-Control Positives	23%	25%	25%	25%	14%	20%	23%	15%	16%

Table 35: Overall Adoption by Segment

	All Oregonians	Cautious Positives	Unconcerned Indifferents	Uninterested Negatives	In-Control Positives
Home Broadband	82%	87%	70%	64%	96%
Dial-up	3%	2%	5%	4%	2%
Internet Other than Home	3%	2%	5%	6%	1%
Nonuser	12%	9%	21%	26%	1%

Table 37: Type of User by Segment

	All Oregonians	Cautious Positives	Unconcerned Indifferents	Uninterested Negatives	In-Control Positives
Non-User	12%	9%	21%	26%	1%
Light Users (1–5 Activities)	20%	20%	23%	27%	11%
Moderate Users (6–8 Activities)	21%	24%	17%	19%	20%
Heavy Users (9–11 Activities)	28%	29%	18%	21%	37%
Power Users (12+ Activities)	19%	19%	20%	7%	31%