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Tec-Ed Whitepaper

Extended Validation and VeriSign Brand

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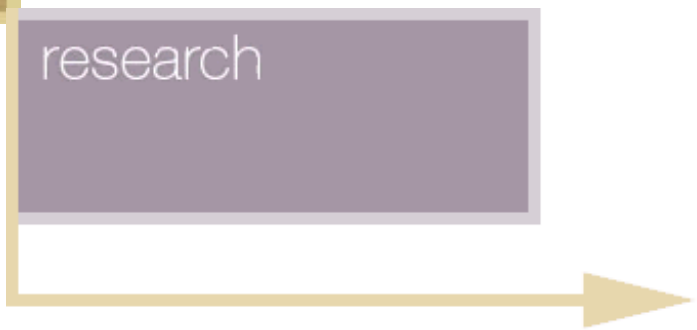

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Executive Summary of Study Findings

The Extended Validation (EV) Research Study explored people's reported level of trust in extended validation SSL after they learned what it means and offers. Conducted as a "blind" study, it consisted of 384 individual sessions, each 20 minutes long, facilitated remotely via WebEx and telephone (that is, a Tec-Ed researcher was on the phone with each participant during the WebEx session). Participants viewed Flash prototypes of fictitious web pages shown in an Internet Explorer 7 window and responded to the facilitator's scripted questions and to a displayed rating scale.

The session protocol presented imagined scenarios of performing online shopping tasks at two unfamiliar consumer electronics e-commerce websites, one with and one without an Extended Validation address bar, and elicited participant reactions, ratings, and predictions of their future actions. Half the participants viewed the EV website first and the non-EV website second, and the other half viewed the non-EV website first and EV website second. The study also explored participants' recognition of various Certification Authorities and impressions of VeriSign in particular.

The study led to the following conclusions.

Recognition of the Value of Extended Validation (EV)

- Users who hear a simple description of what the green EV address bar indicates about site security report that they see value in it.

  The simple description participants heard in this study was: "**The green address bar in Internet Explorer 7 means that this website is an Extended Validation website. Extended Validation, or EV, means that the website owner has gone through extra, rigorous steps with an authorized Certificate Authority to prove they are a secure site.**" For most participants, this description was sufficient for them to say they preferred sites with the green EV address bar to sites without it.

Predicted Future Actions

- **Preference for sites with EV:** Most participants said they would feel more secure doing business at the site with the green EV address bar. Their reasons for this preference are: the sense that **companies care more** about their feeling of comfort by taking this extra measure, the easily accessible **additional information about site security** they have trouble finding on non-EV websites, and the belief that the measure means **extra security**, even though they don't know exactly what extra steps were taken.
- **If a familiar site loses its green EV bar:** Although 59% of participants said they would stop shopping—at least temporarily—at a site that no longer had the green EV address bar, 36% said they would continue, primarily if the site had "https" and the lock icon, VeriSign Secured Seal, or good prices, and if the site had previously provided a good shopping experience. However, only 21% said they would continue without hesitation. A small number of participants said they might not notice the disappearance of the green bar.
- **Unfamiliar sites without EV:** About 67% of participants said they would not shop at an unfamiliar site that did not have the green EV address bar.

Familiarity with VeriSign

- Users who see the VeriSign Secured Seal near the bottom of secured web pages trust the security of those web pages. Many users will continue to use the VeriSign Secured Seal as their primary indicator of a site's security.
- VeriSign has extremely strong name recognition (97%) in the area of site security. The name with the next strongest recognition was familiar to only 65% of participants.

- When asked what Certificate Authority names in the address bar other than VeriSign they would proceed with, most participants could not remember any other CA names.
- If the words in the green address bar for a site secured by VeriSign were to say "VeriSign Secured" instead of "Identified by VeriSign," this consistency with the language of the "stamp of security" users recognize may give them added comfort. Adding the logo checkmark symbol would be even more recognizable.
- The VeriSign name has a strong positive association with security in online financial transactions. Participants described their recognition and feeling about VeriSign in superlatives. In 88% of the responses describing how they felt about shopping on a site with VeriSign named as the Certificate Authority in the green EV bar, participants used words and phrases such as "more secure," "good," "very good," "very safe," "very comfortable," "totally comfortable," "more assured," "confident," "trusted name," "definitely secure," "number one choice," "without hesitation," "feel secure," and "safer."

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Purpose and Scope of the Extended Validation Research Project

Tec-Ed performed a neutral, third-party research study observing online shoppers' reactions to and opinions of the new green Extended Validation (EV) address bar in Internet Explorer version 7.

About Extended Validation Certificates

The goals for Extended Validation (EV) SSL certificates are both to increase user confidence in online commercial transactions and to reduce the threat of phishing attacks. EV certification requires proof from the business that it is a legally incorporated entity with a registered office.

EV SSL certificates are the result of an extensive effort by the Certificate Authority (CA) Browser Forum, an industry consortium of certificate authorities (CAs), browser manufacturers, and accredited WebTrust auditors. Currently, Internet Explorer 7 supports EV certificates, and other browsers are expected to follow suit.

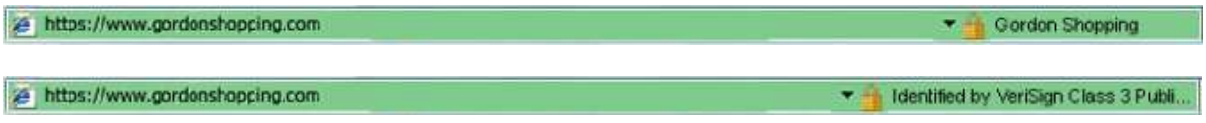
When a user views an EV website within Internet Explorer 7, the browser address bar is green, an SSL lock icon appears in the address bar, and the address bar displays the name of the organization that owns the EV SSL Certificate, alternating with the name of the Certificate Authority (CA), the third party that issued the certificate to the organization. See Figure 1.

Goals of the EV Study

The goals of the EV Study were to:

- Introduce participants to the green EV bar in Internet Explorer 7
- Assess how likely participants would be to enter personal information of increasing sensitivity on sites with and without the green EV bar, after they were introduced to the green EV bar
- Learn participants' preferences for doing business at sites with and without the green EV bar, and reactions to sites that once had the green EV bar but no longer do
- Learn participants' opinions about VeriSign as a Certificate Authority
- Assess the recognizability of other Certificate Authority company names
- Assess whether participants will look for the green EV bar in the future

Figure 1: Extended Validation (EV) Bar as it appeared on the prototypes in the study (organization name alternating with Certificate Authority name)



Study Methodology

Tec-Ed conducted 384 individual usability sessions over WebEx conferencing to reach a nationwide audience. Participants were screened for conducting financial transactions on the Internet and having at least moderate concern about Internet security. See "Participant Characteristics and Recruitment" for a list of the screening criteria.

With a sample of 384 participants, the results are representative of the population of Internet shoppers who have some concern about security while conducting financial transactions online. We estimate there is 95% probability that the actual population of similar Internet shoppers will have the behavior and opinions we observed, within the range of the confidence interval of plus or minus 5%.

The researchers used standard usability testing methodology:

- A Tec-Ed researcher was on the phone with each participant throughout each WebEx session. This facilitated interaction enabled us to confirm that all participants correctly understood the research tasks and questions, as distinguished from remote surveys which do not include "real-time" validation.
- The sessions, 20 minutes in length, were facilitated using a detailed script. The script provided verbatim statements and questions for the facilitator to say to each participant, to ensure a consistent experience from one participant to the next.
- Participants were introduced to a fictitious website with the green EV bar (GordonShopping.com) and a fictitious website without the green EV bar (WhitleyShopping.com). See Figure 2 for illustrations of the two fictitious website home pages.
- To prevent the order in which participants viewed the two websites from affecting the results, the facilitator counterbalanced the order of website presentation. That is, half the participants viewed the EV website first and the non-EV website second in each activity, and the other half of the participants viewed the non-EV website first and the EV website second.

  In addition, counterbalancing was managed within gender groups so that half the participants of each gender saw each website first. Table 1 summarizes the counterbalancing of website presentation across all 384 sessions.

Table 1: Counterbalancing of Website Presentation

Gender	Viewed EV site first	Viewed non-EV site first
Male	96	95
Female	96	97

- The fictitious websites, presented as Flash prototypes, had the same purpose—selling electronics—and featured the same products on their home pages. In the EV version, the address bar was green and displayed the SSL lock icon as well as text identifying the website business name and the Certificate Authority (CA) name. The home page of the EV version also displayed a graphic containing information about extended validation. In the non-EV version, the address bar was white and displayed just the lock icon. (See Figure 2.)
- The tasks in the protocol consisted of:
  - Introducing the green EV bar and new placement of the lock icon in the address bar
  - Exploring user familiarity with various Certificate Authority (CA) names
  - Exploring user perception of security provided by green EV bar for entry of name and address information
  - Exploring user perception of security provided by green EV bar for entry of credit card information
  - Follow-up questions exploring user reactions to sites with and without the green EV address bar

Figure 2: Fictitious Website Home Pages

EV Website Home Page

Non-EV Website Home Page

Figure 3: Purchase Flow Pages in Prototypes

EV Website Purchase Flow Pages

The EV website prototype purchase flow screens showed the VeriSign Secured Seal at the bottom, consistent with showing VeriSign as the CA in the green EV bar. The non-EV website prototype purchase flow screens did not show any certificate authority. A small number of participants (2%) cited the VeriSign Secured Seal as the primary reason for preferring the site with the green EV bar.

Non-EV Website Purchase Flow Pages

Participant Characteristics and Recruitment

Participants were screened to meet the following criteria:

- Frequency of performing online financial transactions—at least once a month
- Kinds of online financial transactions—at least shopping
- Amount spent online—preferably >$1,000 in the past year, minimum $100 in the past year
- Concern about online security: preferably "moderately concerned" or "very concerned"; accepted a few "a little concerned," rejected "not at all concerned"
- Familiarity with the purpose of the lock icon: described it accurately, not just "lock"
- Gender—half of the sessions with females, half with males
- Geographic diversity, across the United States and including Canada
- Browser—use Internet Explorer 6.0 or higher
- Platform—use Windows and have a high-speed connection, for compatibility with the WebEx Conferencing Service
- Consent to recording—must confirm consent to recording release statement via email

The incentive used to attract participation was a $25 Amazon gift certificate.

Tec-Ed advertised in the following locations on Craigslist.org: Atlanta, Baltimore, Boston, Chicago, Dallas, Denver, Houston, Miami, New York City, Philadelphia, Phoenix, Portland, Sacramento, Salt Lake City, San Diego, San Francisco, Seattle, and Toronto. Tec-Ed also advertised in the Ann Arbor News daily newspaper.

Of more than 4,800 responses, about 3,000 candidates met the screening criteria, about 600 sessions were scheduled, and 384 completed sessions were used for analysis. Participants were located in 43 states and 2 Canadian provinces.

Noncompleted sessions occurred primarily when participants did not reply to the invitation email with their consent to recording or did not attend their scheduled session. Recruiters and facilitators telephoned participants to remind them of sessions, and some participants agreed to "stand by" during multi-hour time segments in case they were needed.

Appendix A summarizes the characteristics of the 384 participants whose session data comprised the basis for the results reported.

Findings and Supporting Data

First Impressions of the Meaning of Extended Validation

At the beginning of their session, participants were presented two fictitious shopping website home pages (see Figure 2) and asked to look at the top of the browser and identify what security and privacy features they saw.

1 27% of participants commented on the green address bar before learning what it signified.

60% of the users who commented on the green bar were not IE 7 users.

2 92% of participants viewing the EV website mentioned the lock icon at the top of the browser as an indicator of security, while 97% of participants viewing the non-EV website mentioned the lock icon.

For some participants, the green color of the EV bar as it appeared on the prototype web pages interfered with the noticeability of the lock icon. In addition, the position of the lock icon further to the right on the EV bar on the prototype web pages drew comments from participants, who said the lock was easier to see when next to the URL.

3 Some participants clicked on the arrow next to the lock icon or on other links for more information.

On the site with the green EV bar, 32% of participants clicked the arrow next to the lock or a "more" link for more information, either when first viewing the site or after hearing the facilitator's explanation of the meaning of the green EV bar. The orange graphic describing the green bar received little attention at first, then more attention when participants were asked whether they would fill in credit card information on the website. These elements of the prototype were considered typical of what an online storefront might display to promote its EV certificate.

4 74% of participants made positive references to security when describing their initial reactions to the green bar after receiving the explanation of it.

Terms such as "confident," "good," "reassuring," "nice," and "comfortable" appeared in responses to the question about what participants thought when they looked at the green EV bar after learning about it. Sample comments include:

- I love the green. That is the one thing that I love the most because not only is it telling you that it's a secure site, it's easily identifiable.
- Really like it. I have four kids. I do a TON of shopping online. I love the idea of more security.
- I feel more confident shopping on a site that has more security. It's not some fly-by-night operation. It's an actual merchant. I like that it's secure and won't steal my ID. The color makes it obvious and the lock is nice because it's something we already know.
- Now I know green means it's gone through another process, it makes me feel more secure. It's a good extra step to show me visually this site has taken extra steps. I feel secure to send information through.
- To have it show that it's more secure is good. I shop online but you're always a little afraid. Knowing that it's a little safer means I'm more likely to buy there.

Likelihood of Entering Name and Address on Sites With and Without the Green EV Bar

Participants were asked to imagine they had found an item to purchase on an unfamiliar website, had put the item in their shopping cart, and were now presented with a form asking for their name and address information. Below are pictures of the website pages that were individually presented.

Figure 4: Pages for Entering Personal Information

EV Website Page for Entering Personal Information

Non-EV Website Page for Entering Personal Information

Participants were reminded that this was their first experience at the website. They were asked what they would do at this point (open-ended response), and then presented with a rating scale from which to select a response representing the level of likelihood that they would enter their name and address information on the web page.

The rating scale choices and their meanings were:

- **4: Most Likely**—I would enter my personal information on this page
- **3: Somewhat Likely**—I would probably enter my personal information on this page
- **2: Probably Not**—I would probably not enter my personal information on this page
- **1: Would Not**—I would not enter my personal information on this page

5 On the EV website, 89% of participants assigned a rating of 4 (Most Likely) to their likelihood of entering their name and address, compared to 44% of participants who assigned a rating of 4 (Most Likely) to entering their name and address on the non-EV website.

	Site with EV bar: Rating on entering name and address information				
Gender	1	2	3	4	Total
F	0%	0%	7%	93%	100%
M	1%	2%	13%	85%	100%
All	0%	1%	10%	89%	100%

	Site without EV bar: Rating on entering name and address information				
Gender	1	2	3	4	Total
F	4%	15%	28%	53%	100%
M	6%	20%	39%	36%	100%
All	5%	17%	34%	44%	100%

For the non-EV website, 22% of participants assigned a rating of 1 or 2 (Would Not or Probably Not) to their likelihood of entering their name and address, while only 1% assigned a rating of 1 or 2 (Would Not or Probably Not) to their likelihood of entering their name and address on the EV website.

Likelihood of Entering Credit Card Information on Sites With and Without the Green EV Bar

After participants responded to the questions about entering their name and address information, they were presented a form asking for their credit card information, asked what they would do, and then presented the same rating scale. Below are pictures of the two web pages that were individually presented.

Figure 5: Pages for Entering Credit Card Information

EV Website Page for Entering Credit Card Information

Non-EV Website Page for Entering Credit Card Information

6 On the EV site, 87% of participants assigned a rating of 4 (Most Likely) to their likelihood of entering their credit card information, compared to 28% of participants who assigned a rating of 4 (Most Likely) to entering their credit card information on the non-EV website.

	Site with EV bar: Rating on entering credit card information				
Gender	1	2	3	4	Total
F	0%	2%	5%	93%	100%
M	1%	3%	15%	81%	100%
All	0%	3%	10%	87%	100%

	Site without EV bar: Rating on entering credit card information				
Gender	1	2	3	4	Total
F	17%	16%	35%	32%	100%
M	19%	22%	35%	24%	100%
All	18%	19%	35%	28%	100%

On the non-EV website, 37% of participants assigned a rating of 1 or 2 (Would Not or Probably Not) to their likelihood of entering their credit card information, whereas 3% of participants assigned a rating of 1 or 2 (Would Not or Probably Not) to their likelihood of entering their credit card information on the EV site.

Participants who selected Most Likely for entering credit card information on the EV site had these comments:

- Shows name of company and who they are registered with. Pretty good feature.
- I would go ahead and provide my credit card details because they have all the security features.
- Now that I know the green address bar is secure site, I'd fill it out with no problem at all.

- I'd give them my credit card information because I was interested in shopping with them. Has the green bar, so I wouldn't worry about it.
- I would put in my credit card number. The green address bar gives me extra peace of mind.
- I would go ahead and give my credit card information. The green bar makes me feel more confident that the site is a real site.

Preferences for Doing Business at a Site With the Green EV Bar Versus at a Site Without the Green EV Bar

After participants viewed the sites, heard the description of Extended Validation, and indicated their likelihood of entering personal and credit card information when online shopping on a site with the EV bar versus a site without the EV bar, they were asked the following question:

Which site do you believe you would feel more secure doing business with?

7 93% of participants said they would feel more secure doing business with the site with the green EV bar, while only 2% said they would feel more secure doing business with the site without the EV bar; 5% said they did not feel more secure doing business with one site over the other.

Gender	Preferred site to do business with			
	EV	Non-EV	No Preference	Total
F	94%	2%	4%	100%
M	93%	2%	6%	100%
All	93%	2%	5%	100%

Categories of reasons that participants gave for preferring the site with the EV bar, along with sample quotes, include:

- **Extra security** *(36% of participants)*: "Having shopped on both, you learn Gordon [EV website] has an extra secure certificate. All things being equal, you want to go with the extra security."
- **Informative** *(28% of participants)*: "I like the green bar—constant flash of security. Normally I see the logo at bottom. This grabs a hold of you."
- **Company cares more about customer** *(14% of participants)*: "They have extra security so they probably care more about the customer because they went through extra security measures."
- **New knowledge** *(8% of participants)*: "I know what the green bar means now."
- **Good feelings, comfort** *(6% of participants)*: "It has certificate to ensure security and privacy. Green color makes me feel good."

Some participant responses were vague or did not refer to the EV bar.

8 Of the 91 participants who assigned equal likelihood to entering name and address information and credit card information at both websites, 74 of these still said the site with the EV address bar was where they would feel more secure doing business.

The majority of these participants cited their perception of extra security when explaining why they chose the site with the EV bar. Here is a sampling of comments:

- Green background in URL tells me it's an extra secure shopping. Also, I like where it shows [organization name] and then the certificate of authority. It's much more noticeable on the green.

- The one with the green bar for sure. It has secondary verification. I'm concerned about someone with a fake website, a similar URL. Having that verification step would reassure me.
- Because of green and also the CA name and lock. They spent extra time to make sure the site is secure and safe.
- Because they have taken one more step to make sure my shopping is secure and safe.

Considering Abandonment of Shopping at an Unfamiliar Site Without the Green EV Bar

Participants were then asked the following question:

If you were shopping at an unfamiliar website and it had no green EV bar, would you consider abandoning your purchase?

9 67% of participants said they would consider abandoning an unfamiliar shopping site that did not have a green EV bar, while 33% said they would not consider abandoning it.

Gender	Consider abandoning shopping at unfamiliar site that has no EV		
	Yes	No	Total
F	68%	32%	100%
M	66%	34%	100%
All	67%	33%	100%

Reasons for considering abandoning the site included too much risk, the possibility of identity theft, the amount of the purchase, and the ability to find the product elsewhere. Reasons for not abandoning the site included continued presence of the lock and "https," doubt that all sites would have EV right away, and presence of the VeriSign Secured Seal.

Reactions to the Green EV Bar Disappearing from a Familiar Site

Participants were then asked the following question:

Let's say that you are a regular shopper at GordonShopping.com, and that one day you return and the address bar is no longer green. What would you do?

When participants asked the facilitator what "the address bar was no longer green" would look like, they were told it would return to white and the lock would still be present.

10 59% of participants said they would stop shopping at a familiar site that had the EV bar but one day did not have the EV bar.

Gender	Reaction if site with EV no longer has EV			
	Continue Shopping	Stop Shopping	Other	Total
F	37%	59%	4%	100%
M	36%	58%	6%	100%
All	36%	59%	5%	100%

Here are some representative comments:

- I would question why it was gone. I'd look around the site for information. I would click the Contact Us and ask about a change in policy. Why would you not want to have your customer feel safe?
- It would indicate something was wrong to me.
- That would stop me in my tracks. I would want to find out why.
- I wouldn't shop there. I would send an email.
- I would worry that the site has been compromised. I would stop until I knew for sure.

Among those who said they would continue shopping, approximately half still expressed hesitation or worry about the situation. Many participants said they would try to contact the company or read web pages to learn of a security breach. Some wondered if companies would let their Extended Validation contract lapse, similar to certificates expiring. Some said they would start worrying about past purchases on the site and the safety of their credit card information used for those purchases.

Of the participants who said they would continue shopping without expressing hesitation (about 21%), some said they were unlikely to notice the change, some said as long as the lock and VeriSign Secured Seal were present they would not worry, and some said they would rely on past good experiences to continue trusting the site.

Opinions about VeriSign as a Certificate Authority

Participants did not see the VeriSign name until presented with a list of Certificate Authority names and asked which were familiar. Near the end of the session, participants were asked more direct questions regarding how they felt about shopping on a site with VeriSign as the Certificate Authority and with other companies as the Certificate Authority.

11 97% of participants recognized the VeriSign name in the list of Certificate Authorities presented, and 18% of participants recognized no names except the VeriSign name in the list of Certificate Authorities.

The second most commonly recognized name was recognized by 65% of the participants.

12 Participants described their recognition and feeling about VeriSign in superlatives, indicating a strongly positive association with the VeriSign name in performing online financial transactions.

Words and phrases such as "more secure," "good," "very good," "very safe," "very comfortable," "totally comfortable," "more assured," "confident," "trusted name," "definitely secure," "number one choice," "without hesitation," "feel secure," and "safer" appear in 88% of the responses when participants were asked about shopping on a site with VeriSign as the Certificate Authority in the green EV bar.

13 Participants appreciated having the site security information presented plainly on websites, and they regarded the VeriSign Secured Seal as a stamp or seal of approval: "the VeriSign."

One of the chief benefits users recognized about the green EV bar is that it provides more information about who is securing the website. The VeriSign Secured Seal is another element that participants regarded as giving them more information. VeriSign is such a trusted name that participants did not question a site's authenticity if they saw the VeriSign Secured Seal on the page.

14 When asked if they would proceed to shop on a site with a Certificate Authority name other than VeriSign in the EV bar, 9% of participants said they would not proceed. Of those 91% who said they would proceed, many said they would need to research other names that appeared and, when asked which names they would proceed with, many said they could not remember the names they saw earlier.

	Proceed to shop on a site with a CA other than VeriSign		
Gender	Yes	No	Total
F	91%	9%	100%
M	92%	8%	100%
All	91%	9%	100%

Looking for the Green EV Bar in the Future

15 100% of participants said they would notice the green EV bar in the future.

Reasons participants gave for noticing the green EV bar in the future were similar to their reasons for choosing the site with the green EV bar as the site they would feel more secure doing business with (see 7).

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Appendix A: Summary of Participant Characteristics According to Screening Criteria

Participants were screened to meet the following criteria:

- Platform: Use Windows and have a high-speed connection (for compatibility with the WebEx Conferencing Service).
- Browser: Use Internet Explorer 6.0 or higher.
- Online financial transaction activity: At least once a month, "shopping" must be one of the activities, and must spend >$100 a year online in the past year (preferably spend >$1,000 in the past year).
- Concern about online security: Must accurately describe what the "lock" means on websites, and must say they are "very," moderately," or "a little" concerned about security when conducting financial transactions (versus "not at all").
- Gender: Preferably half male and half female.
- Consent to recording: Must confirm consent to recording release statement via email.

The following table summarizes the characteristics represented in the participant pool that generated the study results.

Category	Characteristic	% of Participants
Gender	Male	51%
	Female	49%
Locations	States: AL, AR, AZ, CA, CO, CT, FL, GA, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, NC, NE, NH, NJ, NM, NV, NY, OH, OK, ONT, OR, PA, RI, SC, SD, TN, TX, UT, VA, Vancouver, BC, WA, WI, WV	
	Pacific time zone	27%
	Mountain time zone	5%
	Central time zone	20%
	Eastern time zone	48%
Browser	IE only	77%
	IE, Firefox	23%
Frequency of financial transactions	Every day	43%
	At least twice per week	36%
	At least once per week	17%
	At least once per month	3%
	Less than once a month	0%
Amount spent shopping	Less than $100/year	0%
	$100 – $1000/year	40%
	$1000+/year	60%
Concern about security	A little concerned	19%
	Moderately concerned	44%
	Very concerned	37%
Look for lock	Yes	85%
	No	6%
	Sometimes	9%
Household income	Under $50,000	26%
	$50,000 – $100,000	53%
	$100,000 – $250,000	17%
	Over $250,000	2%
	Prefer not to answer	2%
Website viewed first	Gordon (with green EV bar)	50% all, 50% males, 50% females
	Whitley (without green EV bar)	50% all, 50% males, 50% females

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Appendix B: Summary of Data Tabulations

The following tables summarize tabulations of participant behavior and responses from 384 sessions.

Table 2: First Website Viewed

	EV Website	Non-EV Website
1st website viewed	192	192

Table 3: Reactions to Security Features

	Yes	No
EV website: Commented on lock at top	352	32
EV website: Commented on green bar	104	280
EV website: Clicked any working link	107	277
Non-EV website: Commented on lock at top	372	12
Non-EV website: Commented on bar not green (non-EV website viewed first)	19	174
EV website: Clicked any working link after explanations	37	347

Table 4: Recognition of Certificate Authorities

	Yes	No
COMODO recognized	18	366
Entrust recognized	93	291
GeoTrust recognized	114	270
GoDaddy recognized	249	135
Thawte recognized	75	309
VeriSign recognized	373	11

Table 5: Likelihood of Entering Sensitive Information

	Overall	EV Website Viewed First	Non-EV Website Viewed First
EV website: Rating on entering personal info (average)	3.9	3.8	3.9
Non-EV website: Rating on entering personal info (average)	3.2	2.8	3.5
EV website: Rating on entering credit card info (average)	3.8	3.8	3.8
Non-EV website: Rating on entering credit card info (average)	2.7	2.5	3.0

Table 6: Preferred Site to Do Business With

	EV Website	Non-EV Website	No Difference
Site with which feel more secure doing business	359	7	18

Table 7: Consider Abandoning Site Without EV

	Yes	No
Consider abandoning unfamiliar site if no EV bar?	257	127

Table 8: Opinion/Recognition of Certificate Authorities

	Yes	No
Proceed on site with non-VeriSign EV?	350	34
COMODO mentioned	8	376
Entrust mentioned	39	345
GeoTrust mentioned	38	346
GoDaddy mentioned	86	298
Thawte mentioned	41	343

Table 9: Predicted Behavior if Site Lost EV Status

	Continue	Stop	Other
Reaction if site has EV bar and then one day does not?	140	226	18

Table 10: Additional Predicted Behavior about EV

	Yes	No
Mention “hesitate,” “worry,” and “wonder what’s going on” if site lost EV status?	226	158
Notice EV sites in future?	384	0