




EV Certificates: Worth the Investment

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The world today revolves around the web. Virtually every aspect of our personal and business lives has an online component designed to make things more convenient and efficient. You can do anything online from email, to booking travel, to paying bills or investing money, and just about anything in between.

All of these online interactions, however, are based on trust. You trust that the site or service you're connecting to is legitimate. As Peter Steiner pointed out in a cartoon in *The New Yorker* in 1993, though, "On the internet, nobody knows you're a dog." You're just looking at pixels displayed on a screen, connected to an unknown server in an unknown location. You don't really know for sure if the site you're connecting to is, in fact, your email service or your bank, or if it's just a cybercriminal sitting in his living room somewhere in eastern Europe.

That's where certificates come in. The certificate acts as a proxy for trust. Certificate authorities establish themselves as a trusted third-party. We trust the integrity of the certificate authority, and they verify the identity of a company or individual and issue a certificate that validates the associated website as authentic. Instead of a plain HTTP URL, you get the more secure SSL-encrypted connection over HTTPS with the locked padlock to indicate that the session is secure.

By now, most people are conditioned to look for that locked padlock on their browser address bar. Unfortunately, cybercriminals quickly figured out how to game that system and design spam and phishing websites that seem secure even though they're not. The traditional certificate doesn't truly demonstrate to you that the site you're connecting to belongs to the company you think it does. It proves that the company or individual was able to provide enough information to obtain the certificate, and with the certificate they are able to build a site that appears to be secure—but it may still be a spoofed or fraudulent site.

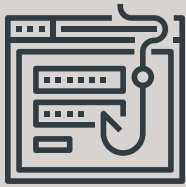
The EV certificate was created to address the weaknesses in the traditional certificate process and provide greater confidence in the websites you connect to. EV stands for "extended validation" and refers to the much more strenuous and exhaustive process used to comprehensively verify the identity of the company or individual requesting the certificate.

Browsers display websites that have EV certificates differently than they do traditional certificates to highlight the increased security and provide peace of mind for users at a glance. Instead of the plain locked padlock, an EV certificate site displays the name in green text or on a green bar and shows the full name of the company that owns the certificate—making it much more difficult for a cybercriminal to attempt to spoof a website for a spam or phishing attack.

EV Certificate Survey

DevOps.com conducted a survey to learn more about how people use the web and how much trust they place in sites that have EV certificates vs. websites that use traditional digital certificates. We gathered input from more than 350 individuals around the world and revealed a number of interesting facts.

KEY FINDINGS



More than 85 percent of those who participated in the survey are worried about being the victim of an online phishing attack.



For all measured behaviors, a website with an EV certificate showed an expected uplift.



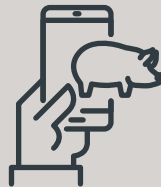
This uplift applied to both online financial and shopping scenarios, as well as across both desktop and mobile browser experiences.



More than half of the survey participants stated that the green address bar has a significant influence on their perception of a brand or company.



Nearly two thirds of respondents indicated that they feel slightly or much safer doing business with a site verified with an EV certificate.



Consumers show an increased propensity to use and sign up for online services they deem to be sensitive (like financial services and those involving PII) when an EV certificate is present.



Consumers also show an increased propensity to purchase online using either credit cards or payment services when an EV certificate is present. That can translate to increased conversion rates in online shopping scenarios.



When an EV certificate is present, consumers are more likely to add recommended items to a cart, which can lead to increased Average Order Value (AOV) and Items Per Cart, both of which can also increase revenue for online retailers.

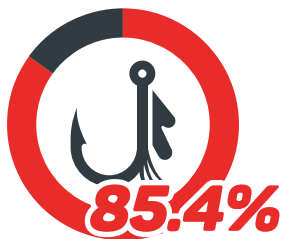
Let's dig a little deeper into the survey results and examine the responses—and what they mean—a little more closely.



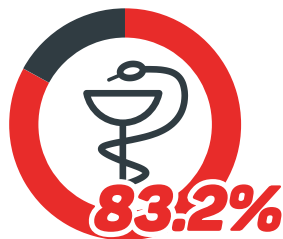
What Keeps You Up at Night?

For starters, we wanted to understand more about the general perceptions and security concerns of the survey participants. It is helpful to determine whether or not online security is an issue they are worried about, and how that might affect their level of trust for the websites and services they interact with. In general, we found the survey participants to be very aware of current threats and concerned with how to defend against them.

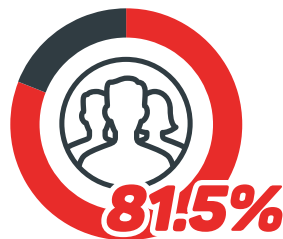
We asked to what degree the survey respondents agree with a list of statements. Here are the percentages of those who somewhat or very much agree:



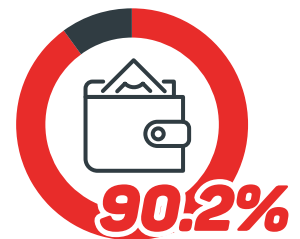
I worry about being the victim of online phishing attacks



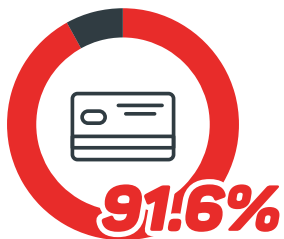
I worry about having my personal health information stolen online



I worry about having my social media accounts hacked



I worry about having my online financial accounts hacked



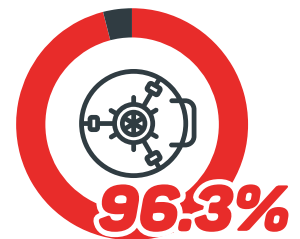
I worry about having my credit card information stolen



I worry about having my identity stolen



I want to do business with companies that invest in best-of-breed security solutions



I want to do business with companies that protect my confidential information

Across the board—at least eight out of ten respondents agree that they are worried about these things. Given that as a backdrop, let's find out how important an EV certificate and confidence in the identity of the company behind a website is when deciding what information to share or whether or not to conduct business with a given website.

Desktop Browsers

We presented survey participants with two images of the same website in a desktop browser: one with the standard certificate verification—a locked padlock with an HTTPS URL, and the second with EV certificate validation—a green indicator displaying the name of the verified company. You can see the two images side by side in the image below.



We asked a number of questions based on the two images to determine if—or how much—the green indicator and name of the company in the EV certificate version has any effect on the perception of the user or any influence on how they choose to interact with the website. The answers we got are very enlightening.

In this pair of images, Site A—on the left—has the standard HTTPS and padlock, but Site B—on the right—has the green address bar and name of the verified company. Nearly two thirds of survey participants were somewhat or completely likely to make financial transactions online with Site B, but only 15 percent of users would do the same with Site A. **The presence of the EV certificate increases the likelihood of making a financial transaction by more than 50 percent.**

The results were very similar for other actions such as signing up for a new account, sharing personally identifiable information, and filling out a form to get more information. Only 16.9 percent of survey respondents were somewhat or very likely to engage in signing up for a new account, just under 13 percent for sharing personally identifiable information and about a quarter would fill out a form to request more information.

With Site B, the response was essentially the opposite. The response ranged from about 60 to 70 percent indicating that they would be somewhat or very likely to sign up for a new account, share personally identifiable information, or fill out a form to get more information. **The presence of the EV certificate in Site B increases the probability that the user will sign up for a new account by 42.5 percent, share personal information by 57 percent, and fill out a form on the site by 37.5 percent.**

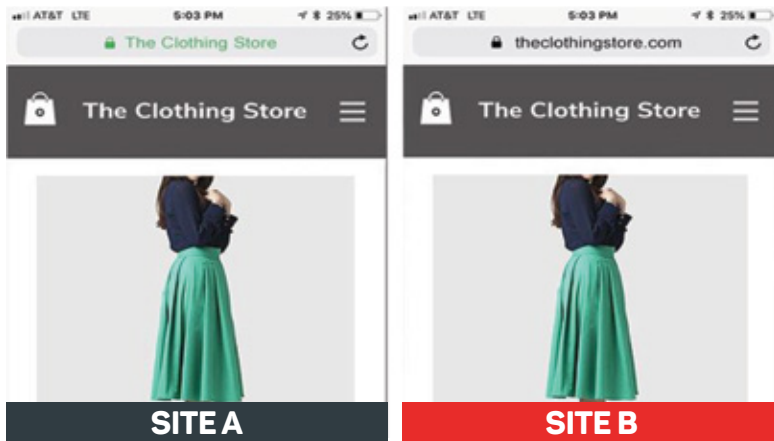
We also asked survey participants to rate a number of statements on a scale from 1 to 5—with “1” being much more for Site A, “2” slightly more for Site A, “3” neutral, “4” slightly more for Site B, and “5” much more for Site B. While a fair percentage ranked many of the statements as neutral, for those who had an inclination one way or the other, Site B is a clear and decisive winner.

Removing neutral responses, here is a breakdown of the statements and the percentage of responses that chose Site A vs Site B



Mobile Browsers

People use mobile devices like smartphones and tablets differently than desktops. The activities performed on mobile devices are different and the way websites show up in the mobile browser doesn't look the same either, so we also asked the survey participants to weigh in on a similar list of questions using side by side images displayed in a mobile browser. In this scenario, it is Site A that has the green address bar and verified company name, and Site B that has the traditional certification and padlock.



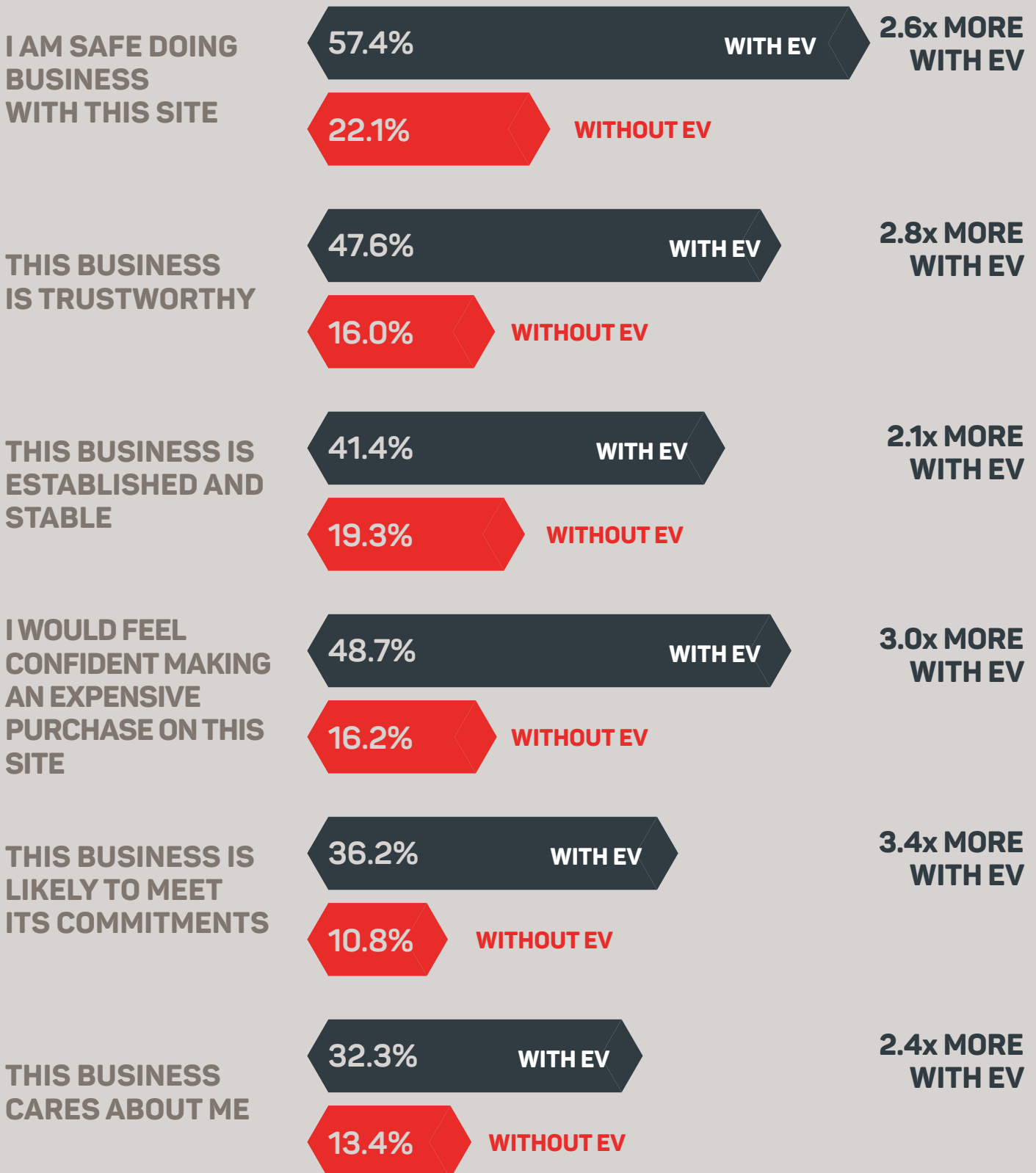
We asked survey participants how likely they are to make a purchase from their mobile device given these two images. Just under 60 percent indicated that there is a 60-100% chance they would make a purchase with Site A, compared to only 21.6 percent for Site B. **That means there is a 36.5 percent greater chance of a customer making a purchase on a website with an EV certificate.**

When we asked about the willingness of survey participants to enter credit card details, we found that people are much more cautious in general, but still heavily favor Site A. 51.5 percent indicated that there is a strong chance they would enter credit card details with Site A, but only 23.1 percent would say the same about Site B—an increase of 28.4 percent for the website with the EV certificate.

The results were similar when we asked how likely survey participants are to make a payment using a third-party service like PayPal or to add recommended items to their cart—both crucial activities for online retail sites. Based on the survey results, consumers there is a 40.6 percent greater chance someone will be willing to make a payment with a third-party service like PayPal, and a 32.3 percent greater chance they will add recommended items to their cart.

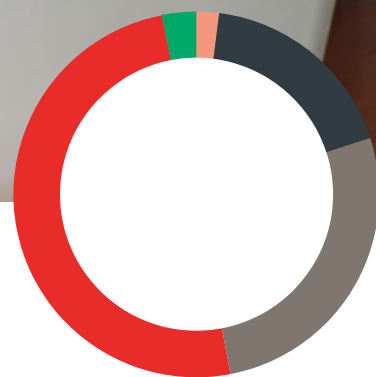
As with the Desktop Browser questions above, we also asked participants to rate statements on a scale from 1 to 5. Respondents were asked to rank a series of statements based on whether they felt it was truer for Site A or Site B or somewhere in between.

Removing neutral responses, visitors lean clearly toward Site A. Here is an overview of the percentages:





How much does the green address bar influence your perception of a brand or company?



By the Numbers

The goal of using an EV certificate is to establish trust and protect the customer—giving the customer confidence to share sensitive information and conduct business with your website online and giving them the tools they need to recognize and avoid phishing attacks and spoofed sites. The data from the survey illustrates just how well EV certificates achieve those goals.

- Not at all (2%)
- Very Little (18%)
- Moderately (27%)
- Significantly (50%)
- I won't do business with companies that don't have it (3%)

There is a clear preference for websites that use the EV certificate. **Eight out of ten survey respondents indicated that the green address bar influences their perception of a brand or company—with more than 50 percent stating that it has a significant influence.**

We posed a scenario to the survey participants. We asked how likely they would be to complete a transaction on a website they visit regularly that features an EV certificate if one day they visited the website and the green address bar and company name were not present. 46 percent responded that they would be somewhat or much less likely to complete the transaction—and avoid a potential phishing attack.

What Does It All Mean?

The data from the survey shows that consumers prefer a website with an EV certificate over a website with a traditional digital certificate for all measured attributes. The uplift when using an EV certificate is significant across both desktop and mobile browsers.

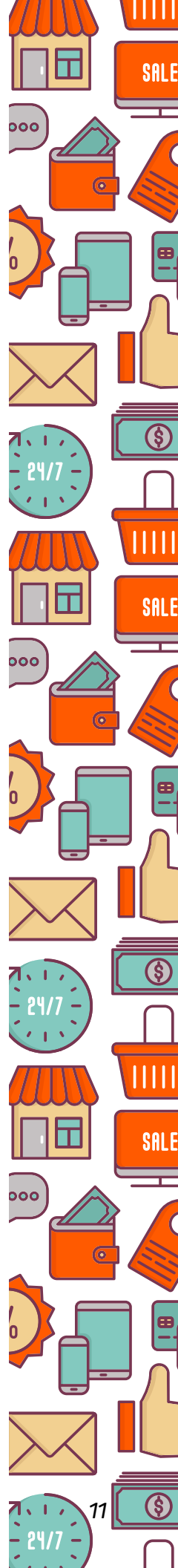
The preference is substantial for in both the banking and shopping scenarios, but definitely stronger for an online banking or financial use case. One reason may be the fact that users are more concerned in general about their online safety for things like financial transactions. Whatever the reason is, there is an uplift of 67.9 percent in customers feeling safe doing business online and 57.8 percent in feeling that a site is trustworthy when using an EV certificate.

The survey found that consumers used the presence or absence of a green address bar to draw broad conclusions about other aspects of the business. The EV certificate influenced consumer perception of a company's stability, level of customer service, ability to meet its commitments, and how much—or whether—the business cares about customers.


Consumers also have a high propensity to conclude that companies using an EV certificate on their website generally employ the best available technology—which also instills confidence. The difference between a website with an EV certificate and one without was less pronounced than for direct conclusions about the website's security and trustworthiness, but they were still significant and heavily influence the overall perception the customer has of the brand.

In the retail scenario, not only do shoppers display an increased willingness to do business, but they also reported higher confidence in making expensive purchases, which makes the EV certificate even more important for retailers offering luxury goods or high-value items. It also suggests that including an EV certificate on a retail shopping website might—in addition to increasing the overall conversion rates—also increase the average order value (AOV) by enabling the purchase of more expensive items.

There are two axioms that drive businesses—perception is reality, and the customer is always right. The results of this survey illustrate that an investment in an EV certificate plays a significant role in influencing customer perception and fostering trust. The increased consumer confidence has a direct impact on revenue and improves the bottom line for companies that use an EV certificate.





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