The Value of Truth Telling

Negative memes in the infosphere pose mortal threats, transforming lies and other offensive messages into strategic disabilities

Rick Hayes-Roth
Professor, Information Sciences
Naval Postgraduate School
August 8, 2011

Abstract

Several scholars have suggested that honesty, honor, fairness and other traditional values play a vital role in making capitalism and democracy function (Fukuyama 1995; Zak 2008). Others have recognized that capitalism and democracy reward greed and reinforce antisocial manipulators (Hayes-Roth 2011a). Some believe that enterprises can reconstruct themselves profitably around the principles of integrity and honoring one’s word (Jensen 2011). Our research complements their work by showing how lies materially harm business prospects, making it possible to increase value through truth telling. In the Internet Age, both harmful and salutary information flow at increasing rates, amplifying the latent value of truth (Hayes-Roth 2011c). Promiscuous customers have little loyalty to vendors and shun untrustworthy ones as too risky. The Internet will soon offer improved mechanisms to identify liars and truth-tellers and to filter out untrustworthy messages automatically. Businesses and other organizations will need to seize the opportunities to significantly improve their truthfulness quotients. Quantitative measurements of the value of truth telling will help management steer in a positive direction.

Introduction

“Any smart person learns the importance of lying by age 10” – Anon.

“We want to be proud of Enron and to know that it enjoys a reputation for fairness and honesty and that it is respected” – Enron’s ethics code

In the Internet Age, when information memes spread at virally epidemic speeds, a reputation can be destroyed overnight. Much of business history was written in a different age, when information moved slowly, with great friction. In that world, powerful people and companies could control release and limit dissemination. The rise of the World Wide Web, social networks, and instant communications has destroyed that stable foundation. In a competitive, global, Internet-powered economy, every customer decision can be affected by quickly disseminated and shared information. In this new arena, the consequences of lying and dissembling can be swift and fatal (observe Congressman Anthony Weiner’s demise; see also the downfall of BP’s CEO Tony Hayward). A single bad review on the Internet can destroy competitive prospects for sales. Where “honesty” might have previously been a nice-to-have ethical badge, a lack of integrity now threatens
mortal risk. Hence, an explicit recognition, embrace, and monitoring of honesty is a policy now required for survival. That will require a change from the top down.

Amar and Stevenson wrote in a 1990 Harvard Business Review article that while a few business people lie, most are honest because trusting others increases their opportunities and reduces their costs. So while honesty doesn’t pay, it’s a preferred business orientation.

More recent experience casts great doubt on the idea that most business people are honest. Several major businesses have crashed and burned in fantastic scandals, the entire mortgage industry is suspect, and the public views much of the financial sector as untrustworthy. More generally, the public distrusts corporate executives. Jensen and his colleagues have surveyed the business literature (Erhard 2010; Jensen 2011) and have reached a number of pertinent conclusions. (1) Business leaders routinely lie and cheat. (2) Lying hurts business performance. (3) Honoring one’s word would be good for business but will require a major change.

Scholars of culture such as White (1969) and Dawkins (1990) hold that the best way to understand human culture is to focus on which ideas (“memes”) control resources. The Internet Age amplifies this observation. Hundreds of millions of people now interact socially and conduct commerce in a digital (virtual) environment. In this “infosphere”, perceptions, judgments, and decisions are powerfully shaped by information events (“messages”). Increasingly, business is digitally conducted, based on individuals’ considerations and choices among alternatives represented entirely through messages about the candidates and their competitors.

Until the convergence and exponential growth of information and communication, businesses had great control over messages. Information travelled slowly and with great friction. PR and advertising could be aimed at target consumers with great effect. In addition, the costs to customers of finding and selecting an alternative supplier were much higher. These conditions contributed to a virtuous cycle of loyalty, where businesses could cultivate loyal customers, providing them better information and service, and extracting premium margins and recurrent revenues (Reichheld 1990; Reichheld 1993; Reichheld 2001). Many information services born in the Internet Age aim to create loyalty and lock-in through superior information experiences (Urban 2000).

Because barriers to entry now are so low for suppliers of traditional products and services and because so many companies have no distinctive differentiation, many vendors compete to sell each type of product and service. The Internet enables these suppliers to announce their wares to all, at very low cost. Similarly, the Internet and its search engines make it easy for customers to seek out vendors and deals. This increases the number of promiscuous customers, who have no significant loyalty to any particular vendor. The basic decision logic of the promiscuous customer seeking a particular product is to choose the best value among all trustworthy or low-risk suppliers. Customers rule out untrustworthy or risky suppliers from consideration (Ha 2004; Resnick 2006; Vallens 2008). Any vendor who has a perceived problem with lying, cheating, or

New social networking environments such as Facebook and Yelp! make it easy for dissatisfied consumers to spread negative messages to others. When received from trusted sources, these negative messages are difficult to neutralize. A single website such as RipOffReport.com provides thousands of negative messages, grouped by industry, company, and locale. For example, in June 2011, a search for negative messages about “lying” by “mortgage companies” generated 2461 individual messages. If promiscuous customers seek to avoid untrustworthy companies, they will find it easy to generate lists of lying businesses to avoid.

The promiscuous consumer can use several different models to assess riskiness or trustworthiness of a company in comparison to alternative suppliers. With most of these models, **even two or three negative messages will eliminate a company from consideration.**

As available information grows exponentially, we all face an infoglut that is not manageable merely by working faster (Denning 2006a). This condition creates incentives for information “curating” so a customer can quickly find true, high-valued information. The value of information derives from its ability to improve the customer’s opportunities. Negative messages that avoid risky transactions will be valued (Hayes-Roth 2006).

So the coming decade will see businesses competing based mostly on messages about them. Positive messages, to the extent they reflect uniform customer satisfaction, will be increasingly important. High integrity will become synonymous with honoring “one’s word.” This will place a premium on honesty in all transactions, including honestly admitting the causes of mistakes and honestly undertaking remedies. Those who think they can succeed by hiding errors, cheating stakeholders, or telling half-truths will find themselves increasingly scorched by white-hot Internet glare. As with most other principal business objectives, this type of managed outcome will require top-down objectives, measures, auditing and incentives. The good news, for businesses, employees, stockholders, and citizens is that in the age of open uncontrolled observation and reporting, honesty is the best policy.

At this time, we should revise the “managers’ handbook” to illuminate and leverage the value of truth telling. Truth telling is good business, vital for retaining loyal customers and successfully competing for promiscuous ones. The Internet Age will make honesty pay handsomely.

**Understanding and Modeling the Value of Truth Telling**

Economists have long understood how information and value intertwine. Hayek’s major contribution was to argue how prices reflect distributed information about supply and
demand, and how the production of that information could not effectively be centralized (Hayek 1937; Hayek 1945). In a related way, the Internet has spread information quickly and extensively that affects billions of buying decisions, each made in a decentralized way. When faced with options, the buyer accesses information about the candidates to decide which option to purchase.

Most enterprises today operate in distributed ways, in networked and distributed environments. The information that surrounds these enterprises fuels the decisions of those within the enterprise and those that interact with the extended enterprise (Denning 2006b).

Figure 1 shows the primary stakeholders who contribute to Enterprise Value. We are focusing in this paper primarily on Customers and Customer Prospects. Customers contribute to Enterprise Value through profitable purchases. All stakeholders are awash in information about the Enterprise, especially that which is available through the Internet and related communication media. Each stakeholder attends to a small fraction of available information and uses that to inform decisions. Mostly people outside the employ or control of the Enterprise produce the content of the infosphere.

Negative memes in the infosphere are potentially lethal to the Enterprise, because they significantly and adversely impact on decisions about whether to buy what the Enterprise is selling. Prospective customers will shun suppliers with negative reputations. Investor Prospects face a similar “buying” decision, and they too will avoid buying stock in a company viewed as risky or untrustworthy. Employees and suppliers, and prospects in these categories, consider information about the company in a similar way, and negative information will make it more difficult for the Enterprise to close “sales” with those stakeholders as well.

Figure 2 contrasts how loyal customers and promiscuous customers make purchasing decisions. Loyal customers are very valuable to enterprises, because they will sustain recurrent purchases for years and also overlook some negative messages (Reichheld 1993; Reichheld 1990; Reichheld 2001). When they compare their preferred seller to the alternatives, loyal customers will choose the preferred seller unless there is a big disadvantage in perceived ratings of the sellers. Promiscuous customers, on the other hand, are price and value-sensitive. They have access to much information about alternative sellers and no a priori bias. Promiscuous customers will eliminate sellers they
deem risky, usually based on negative or disconfirming information. They will then choose the best value offer from the sellers that they believe are trustworthy.

The rise of Promiscuous Customers parallels the spread of the Internet for several reasons. First, e-shopping was made easy and ubiquitous as the Internet became the dominant form of communication. The World Wide Web and supporting technologies were important, and after a decade of experience with companies such as Amazon, consumers became accustomed to seeking most of their information on-line about goods and prices. In addition, sales tax advantages and lower margins trained consumers to expect bargains on the Internet.

Even as the great recession continues, the shift to e-shopping is continuing. For example, one organization that measures Internet-based sales reported (Anonymous, comScore, 2011), “The second quarter of 2011 saw a continuation of this year’s solid double-digit growth trends in online spending, well ahead of the rate of growth in consumers’ overall spending… As a result, it’s clear that consumers are continuing to shift to the online channel, with almost $1 in every $10 of discretionary spending now occurring online. E-commerce’s benefits of convenience and lower prices continue to be the drivers of the shift.”

At the same time, purchasing from distant strangers strengthened the consumers’ sense of personal responsibility for getting adequate information. This amplified the consumer’s awareness of commodity qualities and further reduced brand and retailer influence. The net result is that buyers feel empowered and reinforced for making informed decisions, and the Internet makes it easy for them to both get the information they need and transact the purchases. If customers have loyalty today, it’s increasingly based on accomplishing satisfying transactions, with high reliability, at low costs with e-tailers.

Figure 3 shows two common psychological models of how customers deal with negative or “offending” experiences. The upper model shows that a trusting customer will tolerate one or two offending messages, but after that the offending seller basically “strikes out.” In the lower model, the customer dynamically adjusts his or her rating of a seller’s trustworthiness based on events (messages received). Offending events reduce the trustworthiness in proportion to an aversiveness coefficient (“beta”). Reinforcing events increase the trustworthiness rating in proportion to a reward coefficient (“alpha”). The
actual size of a change in either direction, $\Delta(t)$, is also proportionate to the available room for change, $1 - R_S(t)$ upward or $R_S(t)$ downward.

The two learning models in Figure 3 provide a basis for understanding how Enterprises can lose value when their stakeholders receive negative messages about them. These negative messages can result from negative experiences, as when a promised product is delivered late or in poor condition. Or the negative messages can simply be read or heard. This kind of negative “buzz” can be deadly for a business. When prospective customers investigate a product or service, they pay especial attention to rip-off reports, negative ratings, and other “flames.” Average positive ratings can help, but there’s little cost to a consumer to be risk averse with their own purchasing dollars. The two-strike or three-strike model at the top of Figure 3 reflects a common tendency of people to give a second chance but not a fourth chance. Some people live by the “fool me once, shame on you; fool me twice, shame on me” rule. That’s what we call the “two-strike” rule. The “three strike” rule causes a prospect to write off completely anyone who disappoints him or her three times. If these rules are operating, a second or a third negative message can reduce the Enterprise’s value for that prospect 100% to zero.

In contrast to the all-or-none loss of trustworthiness rating in the two-strike and three-strike rules, a more gradual and continuous learning law is modeled at the bottom of Figure 3. Under that learning model, there’s no single final strike. Rather, each positive event increases the “trustworthiness rating” of the seller, and each negative experience lowers it. Exactly how much and how fast the learned rating moves is determined by some parameters that can be influenced by genetics, mood, appetite, and saliency of the events. In general, positive experiences move ratings up a fraction and negative experiences move ratings down. If the rating of a seller $S$ at time $t$, $R_S(t)$, is scaled between 0 and 1, the amount available for a move upward is $1 - R_S(t)$, and the amount available for a move downward is $R_S(t)$. Usually, negative experiences are felt more keenly, because of a principle of “aversion”. In our work then, we use a beta that is generally twice the magnitude of alpha, so that downward moves happen more quickly than upward moves. In contrast with the two-strike or three-strike rules, this continuous learning model moves ratings up and down with positive and negative experiences, and moderately amplifies the significance of negative messages.
Because lies, deceptions, and other failures to honor one’s word will normally be viewed as offending messages, there is little room for negative messages if the enterprise desires a positive reputation. Truth telling is mandatory.

**Mechanisms for Amplifying Truth Telling and Multiplying the Value of Truth**

In some of our other research (Hayes-Roth 2011b), we have investigated how sellers can increase the salience of true messages they want to deliver to audiences. Examples might be advertisements for products, services or even political candidates. We experimentally evaluated the ability of advertisements to influence consumer or voter behavior under three different conditions. In the control condition, the advertisers made plausible assertions in typical ways. An example might be that “this running shoe outperforms all others” or that “Jones has a track record of working across the aisle for bipartisan objectives”. In the second condition, such statements could be adorned with images of various seals that connote increased trustworthiness. One kind of seal would be a gold-star shield or an impressive looking medallion. We call these images “generic seals” because they actually signify little and promise nothing. In the third and final condition, we affixes a “TruthSeal” mark to objective claims that had been vetted and carried guarantees against falsification. The truth-sealed statements actually offered bounties to challengers who could present data that would falsify them. In this way, we conveyed to the audience that statements bearing TruthSeal marks justified a greater level of trust.

Our results were overwhelming and held across all kinds of selling categories, whether products, services or political candidates. All seals made a substantial difference, and TruthSeal marks influenced decisions significantly more than generic seals. A TruthSeal increased the odds of a consumer choosing that option by a factor of 4 to 1 over comparable advertised options that lacked any such seals.
We live in a world of information glut (Denning, 2006a). On the one hand, we have ready access to more information than we can possibly digest or even browse. In addition, we are bombarded with advertising and promotional messages producing a veritable sense of attack or overload. People would clearly benefit if they could easily filter information based on its quality, such as automatically eliminating falsehoods or ungrounded claims or highlighting vetted statements guaranteed to be true. Because of the need and potential value, we anticipate this kind of filtering eventually will become common.

Our data make it clear that authors, advertisers and publishers can significantly increase the impact of their messages in contexts where consumers and decision makers are influenced by the credibility of information claims. This will be salutary for authors, sellers, and candidates who have truthful statements to make. The use of such seals to provide ubiquitous meta-data about the credibility of information could usher in an era where everybody can more easily and usefully filter facts from untrue claims.

Truth-value markings can cut both ways, however. Negative statements about companies and candidates will be more harmful if they are trusted, and TruthSeal marks can be used to amplify the credibility and impact of such statements. While many companies have operated creatively in the gray area between fact and fiction, occupied mostly by advertising and public relations, their freedom to thrive by staying in that area will decline significantly in the coming years. Objective, vetted claims will stand out, and when they carry guarantees and award bounties to challengers who can falsify them, many more people will become involved in the activity of truth scouting. This creates an opportunity for those who wish to leverage truth telling. It erodes the value and long-term viability of those who cannot or will not compete on factual bases.

As the world comes to demand truthful, high-quality information, business opportunities arise for those who can assess or curate information. Some businesses and non-profits have already moved into this arena. As digital information becomes more dominant, search engines will increasingly need to help users find valued information, lest they become mere relay stations for spam and low-quality “content farms.” The new value potential of truthful information can reshape information markets as well as accelerate new management practices.

Managers have a vital interest in sustaining business reputations and profits, free enterprise, and democracy. These all benefit directly from a focus on truth telling. Truth telling should be a principal measured objective for all Internet-age leaders.

Conclusion

Businesses need to adopt innovative approaches for the full range of internal and external communications to measure, monitor and assure an increasing level of honesty. Jensen and his colleagues (Erhard 2010; Jensen 2011) have hit a similar theme with their emphasis on Integrity and equating integrity with “honoring one’s word.” Their work shows that integrity failures have many costs and that nearly all companies and people are in a state of non-integrity. We want to build on those insights by combining them with several others. In particular, we point to a rise in “promiscuous customers,” namely
those who are not long-term loyal customers, typified by Internet shoppers. These customers are price and value-sensitive. They avoid risky sellers and transactions, seeking the best bargain among sellers they see as trustworthy. We introduced a few simple models that show how high-integrity interactions are vital for sellers to capture these buyers, as well as being vital to retaining “loyal” customers, who are even more valuable. These models show that events that offend customers significantly harm the prospect for selling to them. Dishonesty is a significant source of such offending events, and one that in practice could be entirely controlled by effective management techniques. In short, enterprise value is becoming significantly more sensitive to negative information, and the enterprise that doesn’t work to control that is asleep at the switch.

Businesses will want to participate in, affiliate with, and contribute directly to the “curating” of trusted information, because this will enable them to create and exploit competitive opportunities for trustworthiness, distinction, and differentiation. Customers are seeking reliable information to distinguish good and bad actors, so there’s an opportunity to gain advantage from “white hat” status.

Finally, as information volumes continue to grow exponentially, new filters and search algorithms will evolve that will increasingly cater to the “tastes” of their users. Some will prefer entertainment and confirming “comfort” data. Others will prefer valuable, significant, opportunity-enabling trustworthy information. Businesses will need different methods and approaches to serve these two different types of taste. Truth telling will be vital for the second type. Customers making choices based on opportunity, value, and trustworthiness will rely on the second type of information for those transactions.

These ideas will play to the strengths of companies that like to compete on brand promises, especially service quality, reliability, and safety. Companies such as Google, Amazon and Apple routinely seek to sustain their images of honesty, quality, and superior service. Many traditional companies, such as P&G and Southwest, also pride themselves on honestly producing superior products, and they should welcome the rise of public sensitivity to truth telling.

The financial sector is afflicted currently with poor brand image, reputation, ethics and morality. There would seem to be an opportunity to build new competitive advantages around straight talk, honest dealings, and guaranteed trustworthiness.

We view each enterprise as a system operating within the information environment. In that infosphere, true and false information generate the rewarding or offending events that shape the consumer’s trust. If leaders aren’t managing themselves against objectives of honesty, they are probably practicing “business as usual,” where honesty is a second-order concern. That lax attitude won’t be adequate in the new environment that punishes misrepresentations quickly and severely. Mistrust is a poison we don’t want to experience reactively. We need to prevent it proactively.

The key idea is that valued bits of information are those that customers will seek out, and the marketplace will get better at delivering those. Deceptive, misleading, and
inappropriate behavior will be reported to those who want to assess the trustworthiness of potential partners. **Honesty in action will improve what’s reported.** Truthfulness in communication will avoid compounding problems. Messages marked as true will outcompete messages marked as false in the competitive infosphere.

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