

# Building User Confidence in Electronic Commerce Transactions via Trust Marks: An Overview and Future Directions

*In response to the call for views and comments by the industry on Trust Marks.  
Prepared by REPTAG.com.*

## Introduction

Trust Marks are a cornerstone of any initiative to build consumer confidence in any transaction, whether via traditional or electronic means. Traditional offline transactions were the ones that engendered the use of now-established trust marks like payment receipts and credit card symbols.

On the other hand, online transactions, because of public uncertainty over their level of security and merchant credibility, require a different set of trust marks, but all based on the universal principles of trust.

## First Generation Web-based Trust Mark Systems

These systems arose directly out of the desire for *data security* and *merchant credibility*. They have been extremely well received by web merchants who consider these marks endorsements of public confidence.

The foremost web authority on the *data security* front is Verisign ([www.verisign.com](http://www.verisign.com)). They have issued 215,000 digital certificates to websites as trust marks and accreditation symbols. A Verisign mark (see right) indicates that all information sent to and from the web merchant is certified as encrypted and protected against disclosure to third parties. Verisign is heavily involved in improving the level of encryption so that all information is safe even to the most organized and talented of hackers.



On the *merchant credibility endorsement* front, TRUSTe's ([www.truste.org](http://www.truste.org)) mission is to build users' trust and confidence in the internet by promoting principles of disclosure and informed consent. These disclosure guidelines ensure that a consumer's data and privacy is never compromised at any stage of a web transaction. A sample TRUSTe trust mark is seen at right.



These two established trust mark systems have formed the bedrock of trust for early web transactions. The early adopters of e-commerce have accepted first-generation trust marks as more than adequate for web transactions. The majority of the consumers, however, have stayed away.

The past few years, however, has seen the rise of a new, second-generational trust mark system which we believe would address this issue.

## **Rise and Acceptance of the Peer Accreditation System**

First generation trust mark systems like Verisign and TRUSTe are implemented via the traditional vertical, top-down approach to accreditation, meaning that an independent, high-level, third party is positioned as the final authority on trust. These top-down accreditation systems have done their job very well, it must be said.

Complementing these systems, and in no way replacing them, are the second generation of accreditation systems. In these systems, an organisation's or person's trustworthiness is determined by the web community, especially by netizens who have conducted transactions with the organization or person in question. These new systems rely on a horizontal, *peer-to-peer accreditation* as symbols of trust.

The website that launched this evolution in trustmarking is eBay ([www.ebay.com](http://www.ebay.com)). As an public auction site, eBay had to rely a methodology by which individuals who put items up for sale were held accountable for keeping their word. They thus allowed a buyer to rate the seller on several key trust indexes upon the completion of the transaction. This way, future buyers would be able to ascertain if a certain auctioneer was trustworthy or not. Within the eBay community, a person's trust rating would determine his success in selling an item.

The peer accreditation system works well on the internet because there is in existence a loose and highly democratic community of people who have the same interests. The internet is also the perfect soil for a concept such as peer accreditation to grow exponentially because of the viral communication effects of all its users. In this viral communication paradigm, an organization's trustworthiness is spread throughout the community quickly once the trust mark begins to gather recognition.

## **Established Peer Accreditation Systems**

There are many established peer accreditation systems in place on the web. They can be divided into two main types.. Accreditation ratings can be generated by either *product/service experts* or the *net community at-large*.

A *product and/or service expert* is usually a community opinion leader who would be a product reviewer for a magazine or newspaper. They are professionals whose jobs entitle them to generate expert opinions about a product or service. On the other hand, ratings generated by the *community-at-large* (or community ratings, for short) are opinions by the general layman consumer.

On the *expert ratings* front, BizRate ([www.bizrate.com](http://www.bizrate.com)), Gomez ([www.gomez.com](http://www.gomez.com)) and Rating Wonders ([www.ratingwonders.com](http://www.ratingwonders.com)) are all established websites provide unbiased quantitative and qualitative performance evaluations of web merchant websites based on surveys, benchmark measurements and customer feedback.

On the *community ratings* front, Epinions ([www.epinions.com](http://www.epinions.com)) and Consumer Review ([www.consumerreview.com](http://www.consumerreview.com)) are leading, trusted sources for consumer-generated product reviews.

These peer accreditation systems have received tremendous response from netizens. The examples given above are but a few of a growing number of such systems. In fact, many of these “voice of the netizens” ratings exist as value-added services provided by established media players like CNET ([www.cnet.com](http://www.cnet.com)) and ZDNET ([www.zdnet.com](http://www.zdnet.com)), thus adding further confidence and recognition because of their widely-known brands.

## REPTAG: A Generation 2.5 Trust Mark

There is an evolution happening within the second-generation trust mark systems. Because of the proliferation of multiple websites providing peer accreditation ratings, it is difficult for a consumer to understand and research the variety of ratings systems and what they stand for.

Enter *REPTAG* (short for Reputation Tag), a brand new peer accreditation initiative by Deep Knowledge, whose mission is to be the standard bearer for all second-generational systems.

REPTAG ([www.reptag.com](http://www.reptag.com), available in Q4 2000) has defined trust in the form of “reputation”, where every web merchant, product or service has a reputation rating. The reputation rating (*see example at right*) gathers expert and community ratings that have been generated by well-established peer accreditation sites mentioned above, and aggregates them into a composite rating. This aggregated rating can then be easily interpreted by a consumer before making a purchase decision. By using REPTAG, consumers need not become entangled in a web of multiple peer accreditation systems with multiple rating scores. All they require is an understanding of the simple REPTAG score. Because it improves on current second-generation trust mark systems, we consider REPTAG a Generation 2.5 Trust Mark.



REPTAG is currently available for consumers to research into the trustworthiness of products and web merchants before they make a purchase. When a potential buyer is browsing a web merchant's shopping site for products, REPTAG can provide aggregated ratings for the product they are viewing.

On the B2B front, REPTAG is engaged with Sterling Commerce Singapore ([www.sterlingcommerce.com](http://www.sterlingcommerce.com)) to power e-business communities with e-business integration solutions, e-marketplace solutions and e-business consulting. On the B2C

front, REPTAG is targeting prominent Singapore-based e-retailers such as MPH Online, Kinokuniya Bookstores and AcmaBooks as pioneer Generation 2.5 Trust Mark businesses.

## **Decision Support is the Direction for the Future**

REPTAG's value proposition as an aggregated peer accreditation system does not end here. REPTAG, in the near future, will extend the value of current trust marks, from providing confidence-boosting ratings and symbols to the consumer, to aiding consumers in making purchase decisions. Such decision-support aids are meant to help customers to identify quickly a good, reputable product from another, and a trustworthy merchant from another. This is a key ingredient of a third generation trust mark.

The following are various initiatives to extend the relevance of peer accreditation trust marks to the end consumer, positioning REPTAG as a viable third generation trust mark:

- *Preference for Trust Sources* – The consumer has the option to decide whether expert- or community-generated ratings, or both, are more important to them. They would also be able to decide if a certain ratings system run by a certain website is more, or less, important to them.
- *Value Rating* – A peer-generated product rating ultimately means less to the consumer if it isn't related to the product's price. As such, the launch of a REPTAG Value Rating would measure the amount of value the product, if purchased, would generate for the customer (essentially a price-vs-ratings system).
- *Promise-Trust Analysis for a Perfect Partnership* – REPTAG has developed a highly detailed peer accreditation system for use in business-to-business (B2B) transactions with the aim of achieving optimum trust-based business partnerships. This trust system (called Promise-Trust Engine) not only takes into account a company's trustworthiness rating (generated by its peers), it also analyses the company's past performance on a range of key performance indicators. Finally, the company's overall trust rating is generated by quantifying, matching and analyzing the company's overall promises viz-a-viz its overall trustworthiness. A more detailed description of Promise-Trust Engine can be found in *Appendix A*.
- *Bridging the Old and New Economy* – Dun & Bradstreet (D&B) is the world's leading provider of commercial credit, marketing and purchasing information, with a business information database of more than 57 million companies worldwide. A REPTAG partnership with D&B to generate a trust mark and rating system that can span both the new and old economies would make both traditional and web-based trust marks relevant in the network economy.

All these, we foresee, will constitute the third generation of Trust Marking.

## **Suggested Government-Private Sectorial Initiatives**

Many of the peer accreditation agencies are startups in their own right, and therefore have to navigate through potential business operation minefields to survive. We believe that the government can play a strong role in ensuring that these second-generation organizations survive to carry on their mission of providing trust marks for the consumer.

As such, we believe that the government should develop initiatives on the following three fronts to help agencies to rollout their products and services to the public:

Firstly, *research and development efforts* in these cutting edge technologies and applications are not easy to maintain. It takes a lot of financial muscle to attract and retain the best minds in this specialist area. Therefore, the government should look into subsidizing a portion of all research and development efforts by the agencies.

Secondly, these agencies should be granted yearly funding calculated based on a percentage of their *business development, “customer” acquisition and market rollout* plans. In line with this plan, the government would assist the agencies to roll out their trust marks to the public, bearing some of the marketing and marketing communications aspects of the rollout. This will ensure that these trust marks are always able to spread their acceptance and usage as far and as wide as possible.

Thirdly, the government could act as a *relationship broker and networking partner* to bring two or more agencies with very strong complementary solutions together. In the new economy, ground is captured not because of a company’s size, or the availability of wide-ranging skillsets within the company, but because of its nimbleness. And the way towards nimbleness is through strategic partnerships.

As Singapore seeks to play a major role in the network economy on a global scale with a combination of good governance and partnership with the industry, we believe that an extremely viable plan of keeping Singapore at the forefront of building trust and confidence in EC is to support a homegrown, globally-attuned, second- and third-generation trust mark initiative like REPTAG.



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## The REPTAG Team

REPTAG was founded by a sociologist and management consultant, a corporate research scientist, as well as an IT consultant. Together they have accumulated 45 years of professional experience and won various awards in their respective areas of expertise.

REPTAG is an initiative of Deep Knowledge Pte Ltd, a member of SFKX Inc., a Silicon Valley based internet technology company. REPTAG has a talented and committed team of 20 members.

REPTAG's investors are seasoned venture capitalists and well established venture capital firms active in global high-tech investments. Our leading investors are:

- **KOH Boon Hwee**  
Chairman, Internet Technologies Group
- **Dan BOSTROM**  
Director, Merchant Venture Investments
- **David FRASER**  
Head, Morning Mist Investment • Co-founder, Infobank • Former CEO, Microsoft UK
- **BOON Suan Lee**  
BSL Consultants • Former Managing Partner, Deloitte & Touche Singapore
- **LIM Ho Kee**  
West River Investments • Former Managing Director, Union Bank of Switzerland, Singapore
- **NG Siong Tee**  
Kontiki Investments

## Appendix A

# Promise-Trust Engine System Description

A key component in B2B relationships is trust. A company's trustworthiness will directly affect its current and future business relationships. But ascertaining a potential customer or partner's trustworthiness is tricky. Businesses currently rely on well-established business information providers like Dun & Bradstreet to ascertain an organization's trustworthiness.

To address the lack of trust in the B2B marketplace, Deep Knowledge is developing a trust system to quantify as much as possible the concept of trust in easy to understand, layman terms for decision support. This system is known as the *Promise-Trust Engine*.

## Promise and Trust

The credibility of a company can be narrowed down to two simple components – *promise* and *trust*. In every business transaction, there are *promises* that are always exchanged – “I promise to pay you \$100,000 when you deliver the planks to me”. The Promise-Trust Engine will quantify a company's promises and assurances into a *Promise Score*. Some aspects of seller assurances which the engine analyses are:

- Warranties and guaranties (eg. Money-back guarantee, etc.)
- Real-world customer and technical support
- Online customer and technical support
- Return and exchange of merchandise policies
- Protection of private information
- Financial background, standing and third-party guarantors

Taking the above buying scenario further, the same transaction can cause both parties to question, “How do I know if I can *trust* the other party?”. The answer to that question would be to analyze the following aspects of a company:

- Online brand equities and their extensions and associations (eg. Look-and-feel, usability, interactivity, etc.)
- Real-world brand equities (eg. Product quality, value for money, etc.)
- Secure payment policies, systems and processes
- Track records of previous transactions, financial performance, technology innovation and product development
- Third party dependencies (eg. Suppliers, componentry, logistics and warehousing partners, and ERP systems)

All these aspects will be quantified into a *Trust Score*.



The Promise-Trust Engine's data inputs for the Promise Scores and Trust Scores are derived from not only a companies' peers but also from established professional and expert viewpoints.

Finally, the company's overall trustworthiness (what we call *reputation*) is then calculated by matching and analyzing its *Promise Score* viz-a-viz its *Trust Score*.

Businesses, when appropriately equipped with the *reputation scores* of their potential customers or partners as a decision support aid, can then better judge whether or not to engage the company in question.