Mitigating Information Trust: 
Taking the Edge off Health Websites

Himani Singal, BIT Mesra, India
Shruti Kohli, BIT Mesra, India

ABSTRACT

Trusting any information on web is psychosomatic and subliminal by nature. The decision is left on
the requestor to assess, judge and corroborate the contents contained in the websites before perceiving
it. This is of acute concern when websites deal with sensitive issues like health. There is no standard
mechanism that embodies or characterizes how to make these ‘trust’ decisions. Although all the web
users make these decisions on a frequent basis, there is no method to comply with the rationale to
take such decisions. This paper is an attempt to provide a solution to the problem of ‘how much the
content, typically provided by any health related website should be trusted?’ A probing has been
done to study the users’ behavior on these websites. This cram makes use of real-time analytical data
collected from similarweb.com for hundred health related websites to analyze web users’ behavior.
The goalmouth is to develop a novel technique to re-rank search results using TRUST as a deciding
factor so that more trustworthy web links appears higher in the results list. The aim is to determine
and discern the users’ attitudinal factors that can be captured in practice without user interaction and
also capitalize on the quality of the trust estimates.

KEYWORDS
Content Trust, Health Information, Medical Trust, Online Interaction, User Satisfaction, Web Trust

INTRODUCTION

In today’s era of ‘Information Age’, information is just a click away. Requestor of information is
returned with numerous links to websites claiming to contain the information being looked for. To
decide which information to devour out of these overwhelming sources is a TRUST issue to decide
upon. Trust is said to be a fundamental and central virtue to assess and possess while evaluating any
association. It is essential in case of web associations too. A web association refers to the process of
information-seeking through websites returned as a result of search query by search engines. It can
be divided into following steps, also depicted in Figure 1.

1. Requestor/User enters a search query in search engine.
2. Search engine returns links of Websites according to the search query.
3. User shortlists these links based on self-decision.

Though search engines use complex algorithms and best mechanisms in predefined manner to
enlist these web-links in an ordered fashion, but none of them guarantees that the information held
by links appearing in the top positions is more trustworthy than the lower ones. Thus the user is left
to decide on his/her own whether he/she should consume the provided information or not.
Studies claim that there is no authoritarian check on all the information on internet due to its vast nature (Marchand, D. 1990, Alexander, J. E., Tate, P. 1999, Hernon, P. 1955, Calvert Phillip J. 2001). Most of the consumers or users of information either has no time to verify the contents or are unable to trace back the information due to failure of browser to find it again. This is a matter of great concern when the search query is related to health/medical symptoms or conditions. According to the most recent research, “eight out of 10 Internet users have, at one time or another, searched for health info on the Web, in part because they feel their healthcare needs are not being adequately addressed by increasingly busy physicians” (Prescient Digital 2015). Pew Internet and American Life Project reported that “half the people who have used the Internet to get health and medical information say this information improved the way they take care of themselves” (Prescient Digital 2015).

Studies pose a big question of safety and trust while consuming this information by pronouncing that “identifying quality patient information isn’t always easy” (Lewis, T. 2006, Baker, L., Wagner, T. H., Singer, S., & Bundonf, M. K. 2003, Eastin, M.S., & Guinster, N.M. 2006). They also pointed that health seekers follow no online search strategies before consuming information, which should be cautiously taken care of, if it is not assessed medically. There may be some commercial benefits prowling in the shadows.

“When people rely on web to gather and distribute information, they can build a sense of trust in the websites with which they interact” (Cheshire, C., Antin, J., Cook, K.S., & Churchill E. 2007). This sense comes from the decisions taken based on prior knowledge or past personal experience by the users. These decisions are made regularly, since there are a lot of sources relevant to a given query. The onus is to exploit this decision-making power of humans to understand the correlates of trust which is essential for constructing better models of trust and online behavior. This study investigates the traits of individual’s personality on content trust (particularly related to health), where content trust refers to the trust judgment on a particular piece of information.
Geometric Distortions-Invariant Digital Watermarking Using Scale-Invariant Feature Transform and Discrete Orthogonal Image Moments
[www.igi-global.com/chapter/geometric-distortions-invariant-digital-watermarking/70980?camid=4v1a](www.igi-global.com/chapter/geometric-distortions-invariant-digital-watermarking/70980?camid=4v1a)

The Societal Impact of World Wide Web - Key Challenges for the 21st Century
[www.igi-global.com/chapter/societal-impact-world-wide-web/18572?camid=4v1a](www.igi-global.com/chapter/societal-impact-world-wide-web/18572?camid=4v1a)