

ANALYSIS OF DECISION-MAKING STRATEGIES UTILIZED BY HISPANIC BUSINESS LEADERS FOR DETERMINING THE CREDIBILITY OF INFORMATION SOURCES

Dr. James L. Morrison, University of Delaware
Dr. Titi Oladunjoye, Albany State University
Mr. Dale Rose, Albany State University

Abstract

In terms of Hispanic business leaders in the U.S., computer capability is a significant factor in the decision-making process for establishing the credibility of information sources located on the Web. Moreover, computer capability is a significant factor in decision-making when completing daily operational responsibilities as well as special project work.

INTRODUCTION

According to a study by the Princeton Survey Research Associates (2002), “online users’ low ratings of website credibility do not stand in the way of people going online and using a variety of sites that are on the World Wide Web.”(pg. 1) However, the report goes on and states that “credibility stands tall among the nine key reasons that users go to one Web site and not another.” (pg. 1) Similarly, in this regard, accessing credible information is a critical need for leaders of today’s organizations as they go about making decisions to enhance their operations. Today, online information accessibility represents a ‘new reality’ as leaders attempt to keep up with the pressures surrounding the planning, organizing, implementing, and controlling of daily operations. In this study, the focus is upon the Hispanic leader, who is becoming a significant factor in today’s labor force. The reference here to an Hispanic leader in this reporting of research is used as a form of classification for the immigrants and descendants of a wide range of ethnicities, races and nationalities, who use Spanish as their primary language. (Wilmington News Journal, 2005)

There are currently 41.2 million Hispanics living in the United States. (U.S. Dept. of Census, 2000) The Census Bureau identifies Hispanic or Latino as an ethnicity, rather than a race. Therefore, Hispanic¹, as defined by the U. S. Department of Census, is one of several terms used to categorize native and naturalized U.S. citizens, permanent residents and temporary immigrants from Spain or the Spanish-speaking countries of Latin America (or the original settlers of the traditionally Spanish-held Southwestern United States).

¹ Aside from "Hispanic", "Latino", and "Latin", other terms are used for more specific subsets of the Hispanic population. These terms often relate to specific countries of origin, such as " Mexican", "Mexican-American", " Cuban", "Puerto Rican" or "Dominican", etc.

INTERNET USE BY THE HISPANIC POPULATION

The Pew Institute Research Center (2005) reports in their publication, "*Hispanics: A People in Motion*," that approximately 60 percent of Hispanics presently use the Internet for email, entertainment, shopping and information gathering. (Pew Institute, 2005) According to this report, the Internet is now seen more as a utility rather than a novelty. While Hispanics value email like almost all other Internet users, they also look to the Internet as a valuable source of information and news. (Pew Institute, 2005)

The use of the World Wide Web as an information tool has increased rapidly over the past decade. In this regard, the Internet as a business tool has increased dramatically, since it is widely recognized as an efficient and cost-effective way for leaders of organizations to communicate and access information for decision-making. Hispanics, relatively new to the Internet, are quickly recognizing the value it also brings to their families and, therefore, are quickly making its tools and features part of their daily lives. Moreover, Hispanics are outpacing the general online market in their use of some of the most advanced features of the Internet, according to the second annual America Online/Roper Hispanic cyber study. (Negecio, 2004) However, there is an extremely wide variety of material on the Internet, ranging in its accuracy, reliability and value.

THE INTERNET AS AN INFORMATION TOOL

According to McLaughlin and Pavelka (2005), increasing accessibility to the Internet by organizational leaders has resulted in it becoming "commonplace to use both the data and the findings from Web sites in their work." (McLaughlin, et. al., pg. 333) However, they go on and caution us that "the possible harm that can result from the use of dirty data, misinterpreted information, and incorrect conclusion can be far-reaching." (pg. 333) Along this same line of thought, Alexander and Tate (1999) remind us that not all available data or information found on Web sites are reviewed by peers or someone in authority. This lack of verification places the burden of judging the integrity of Internet-available data on the users. Accessing credible information on the Internet remains an elusive quest for many. With the emergence of a variety of new search engines on the Internet, the lack of any formal means for categorizing credible sources of information remains an issue. (Johnson & Kaye, 1998)

Harris (1997), ironically through a website known as VirtualSalt, summarizes the dilemma of accessing trustful and reliable information over the Internet in the following excerpt:

Information is everywhere on the Internet, existing in large quantities and continuously being created and revised. This information exists in a large variety of kinds (facts, opinions, stories, interpretations, statistics) and is created for many purposes (to inform, to persuade, to sell, to present a viewpoint, and to create or change an attitude or belief). For each of these various kinds and purposes, information exists on many levels of quality and reliability. It ranges from very good to very bad, and includes every shade in between. (www.virtualsat.com/evaluator8.it.htm, pg. 1)

Kurland (1996) “links browsing the Web as rummaging through the world’s academic, governmental, commercial and entertainment attics.” (p. 134). In this regard, individuals can waste valuable time searching for data on the Web because it lacks a comprehensive cataloging of ‘credible’ sources (Harris,1996) To date, research in online information access has focused on four areas: media comparison, demographics, medium reliance, and message characteristics. (Pew Research Center, 2001.) In this study, we introduce a new ‘demographic,’ the computer capability, for the purpose of analyzing its influence upon information search strategies adopted for decision-making purposes.

HYPOTHESES TESTED

According to a recent reporting in Business Week (2004) on the utilization of information technology in today’s organizations, “Google has rocketed to the top of the Internet search market” (Business Week, pg. 84). However, the same report goes on and indicates that Google’s days of being unchallenged as the leader in Internet searches may be over. In this regard, Microsoft and Yahoo are “poised to make this a tightly contested market.” (pg. 84) However, it should also be noted that the integrity of each of these search engines remains a key issue to the customer in the marketplace.

In view of this emerging competition for the attention of the user of the Internet, the issue of how leaders go about in determining information integrity on websites is the focus of this research. In this regard, the null hypothesis tested specifically relates to the behavioral aspects of decision-making as Hispanic business leaders go about determining the credibility of information. As indicated earlier, a new demographic factor, computer capability, is introduced for analysis. Therefore, the hypothesis tested was:

- 1. The decision-making process followed for determining the credibility of information sources on the Internet will not vary according to the computing capability of the Hispanic business leader.*

For the purpose of this study, credibility is defined as believability. As noted in a report of a study completed at Standard University, ‘credible information in believable information.’ (Fogg, et. al., pg.61) The report goes on and identified two ‘credibility constructs’. First, credibility is described as perceived quality; and in this research, it is the credibility of a computer website that is the focus of study. Secondly, perceptions of credibility may be considered the result of an evaluation of multiple dimension simultaneously. As reported in the Stanford University study and assumed in this study, the two key dimensions of credibility are trustworthiness and expertise.

STUDY SAMPLE

Written questionnaires were mailed to each of 250 Hispanic business leaders in the private sector during the Winter of 2005. The study population was derived from a random sample of a database established by LIST, a list brokerage and management company situated in Lake Success, NY. In this study, a Hispanic business leader is defined as an individual who has the title of President (or Owner), Vice-President,

Secretary, or Treasurer or CEO of a company in the private sector only. Forty-four questionnaires were collected between February 1 and March 1, 2005. However, 3 survey instruments were deleted from the study due to illegible responses. Therefore, the research sample in this study included perceptions of 41 Hispanic business leaders in the private sector, representing 16.4 percent rate of return.

RESEARCH METHODOLOGY

Respondents to the survey were requested to indicate their perceptions of personal computer capability and decision-making processes for determining the credibility of information sources. Initially, respondents indicated their level of confidence in performing 15 computing activities, using a 5-point confidence rating scale. A computer capability mean score (a grand mean score) was computed as an outcome of responses to these 15 items. Then, those in the sample population were requested to respond to a series of survey items relating to their decision-making strategies for determining credible sources, indicating a 1, if they strongly agreed; and a 5 if they strongly disagreed. Finally, respondents were requested to complete a demographics profile.

A one-way analysis of variance (GLM model) was performed on data collected with computer capability being the independent variable. Members in the study sample were classified into '3 computing confidence groups' of users based upon individual computer capability mean scores: no/very low confidence (0 to 1.5 mean rating), moderate confidence (1.6 to 3.5 mean rating), and exceptional confidence (3.6 to 5.0 mean rating). An .05 level of significance was used to accept or reject the hypothesis tested in the study. In addition, a Pair-T Test was also computed on the mean scores of responses to determine if there were any significant differences in information analysis strategies utilized when gathering data to support daily operational routines and special project work.

FINDINGS

With a 1 indicating no confidence and a 5, exceptional confidence, on a 5-point rating scale, Hispanic business leaders in the study generally exhibited moderate to lower levels of confidence in performing computing tasks. (See Table 1 below.) For example, the respondents indicated moderate confidence when using search engines (M-3.537), using the WEB to access information (M-3.463), downloading information into reports (M-3.366), and performing desktop publishing activities (M-3.293). However, for a vast majority of other computing tasks, these business leaders perceived themselves as having a lesser degree of confidence when performing such tasks as using advance search commands (M-1.829), merging information found on the Internet into personal data bases (M-2.63), as well as using basic search commands (M-2.610). It appears that Hispanic business leaders perceive themselves as being slightly to moderately confident when performing tasks related to varied aspects of Web usage as the range of mean scores in Table 2 were 1.829 to 3.685 on a 5-point rating system. Specifically, the overall computing ability mean score of 3.011 indicates that the sample population in this study perceived themselves as having a moderate level of computing confidence.

Table 1
Means of Computer Capability Tasks of Sample Population (N=41)

Computer Task	Mean Rating	Standard Deviation
Level of Confidence in . . .		
Using Web to Access Information	3.463	1.098
Configuring Web Browser	2.707	0.955
Using Search Engines	3.537	1.120
Using Basic Search Commands	2.610	1.282
Using Advanced Commands	1.829	1.070
Using Software to Archive Files	3.195	1.005
Using Web to Interface with Data Bases	2.927	0.877
Using Info. From a Data Base	3.195	1.005
Generating Formulas for Analyses	2.732	0.949
Merging Info. Into Data Bases	2.683	1.105
Accessing Animation from Web	3.685	1.011
Using Desktop Publishing Software	3.293	1.055
Accessing Dist. Learning Seminars	2.463	1.267
Running 2 Separate Prog. Simultaneously	3.488	1.098
Using FTP to Download Files	3.366	1.178
Overall Mean Score	3.011	

Rating Scale: 1 = No Confidence; 3 = Moderate Confidence; 5 – Exceptional Confidence

General Decision Strategy. In terms of an overview of the process of making decisions about the credibility of information along the lines of task characteristic, the respondents indicated very similar perceptions for four of the five decision preferences. For each decision making preference, the findings indicate that respondents to the survey instrument generally preferred to utilize similar strategies no matter if they were working on a daily operational task or on a special project. They also preferred to seek out others to verify the credibility of a website, and not rely on their own judgment. Only when *preferring to consult with one other individual* before make decisions about information credibility was there a significant difference in perceptions at the .05 level of confidence. (See Table 2.) However, the significance of difference in perceptions was in degree of agreement to the decision strategy.

Table 2
Comparison of Perceptions of Hispanic Business Leaders for Determining Credibility of Information When Performing Daily Operational Tasks or Special Project Work (N=41)

Variable Preference	(Mean Scores)		T-Score	Prob.
	Operational	Projects		
Consult w/One Other Person	1.902	2.697	-2.45	.019**
Primarily Rely on Own Ability	3.010	3.048	-1.01	.323
Consult with a PC/Web Specialist	3.146	3.219	-0.83	.412
Seek Out Group Sentiment	2.756	2.682	1.14	.262
Seldom Delegate to Others	2.463	2.532	0.37	.685

Rating Scale: 1 = Strongly Agree; 3 = Uncertain; 5=Strongly Disagree **Significance. .05

When making decisions regarding the credibility of information sources, computer capability was a significant factor in terms of *perceptions of individual confidence and preference to consult another knowledgeable individual with some specific expertise* (See Table 3.) The findings indicate that decisions being made in as to whether information accessed is credible are somewhat being influenced by the leader's computer capability.

Table 3
Computer Capability of Hispanic Business Leaders as a Factor When Determining the Credibility of Information (N=41)

Decision Process Strategy	Daily Operations		Special Project	
	F*	Prob.	F*	Prob.
Consult w/ One Other Person	0.33	.718	0.31	.732
Primarily Rely on Own Ability	6.70	.003**	8.30	.001**
Consult with a PC/Web Specialist	3.23	.051**	3.36	.045**
Seek Out Group Sentiment	0.16	.851	0.64	.535
Seldom Delegate Decision to Others	0.09	.912	0.19	.873

*Statistical Procedure: One Way Analysis of Variance (GLM); (df 2)

**Significance Tested: .05

When comparing leaders who perceive themselves of having exceptionally high computing confidence versus those with exceptionally low computing confidence, the findings indicate both groups generally utilize similar strategies to verify the truthfulness of information. Again, with the factors of *degree of personal confidence* in making such a decision and *consulting with a website specialist*, there a significant degree of difference in perceptions. (See Table 4.)

Table 4
T-Test Measures Comparing Low and Exceptional Levels of Computer Confidence When Determining Credible Information Sources

Decision Process Strategy	<i>(Mean Scores)</i>		<i>(Mean Scores)</i>	
	**Daily Operations		Special Project	
	<i>(Confidence Level)</i>		<i>(Confidence Level)</i>	
	Low	Exceptional	Low	Exceptional
Consult w/One Other Person	1.833	1.750	2.083	1.875
Primarily Rely on Own Ability	3.583	2.625	3.596	2.725**
Consult with a PC/Web Specialist	3.121	2.375	3.250	2.379**
Seek Out Group Sentiment	2.833	2.875	2.750	2.978
Seldom Delegate to Others	2.417	2.625	2.465	2.636

Note: N = 12 - Low Confidence Level (0 to 1.5 mean computer capability score)

N = 8 - Exceptional Confidence Level (3.5 to 5.0 mean computer capability score)

**Rating Scale: 1 = Strongly Agree; 3 = Uncertain; 5 = Strong Disagree

CONCLUSIONS

There are some important distinctions in the decision-making behaviors of Hispanic business leaders when going about determining the credibility of information sources located on the Web. When fulfilling daily operational tasks and completing special project work, computer capability is significant to some degree when making decisions as to the credibility of information sources, especially in regards to consulting with co-workers. In this regard, Hispanic business leaders with a higher degree of computing confidence prefer to consult with others who may be considered knowledgeable (or a specialist) while at the same time fall back on their own ability to make the correct decision. However, those with a lesser degree of computer capability have some doubt in their own ability to make such a decision and show a preference to rely also on others who, however, may not be considered Web specialists. Moreover, regardless of how others feel about a particular website, those with more computing confidence appear more confident to make the right decision as opposed to those with lesser computer capability. However, for other decision processes utilized, computer capability was not a significant factor. Therefore, when comparing computing capability to the degree in the decision making process for seeking out another's opinion and a corresponding confidence in one's own decision making strategy, the null hypothesis that *the decision-making process followed for determining the credibility of information sources on the Internet will not vary according to the computing capability of the African-American* was rejected.

It may therefore be concluded that these leaders have doubts about their individual ability to determine the integrity of the information they are accessing from the Internet. Reliance upon one's own interpretation of what is credible is not a strategy that oozes confidence. However, there is evidence that Hispanic leaders have reservations about their own ability to make the right decision, especially for those with lesser computing ability. Therefore, it may be concluded that establishing 'credibility teams' where individuals can seek out sound advice of those with significant knowledge as to information source credibility may be a useful addition to an organizational structure.

REFERENCES

- Alexander, J. & Tate, M. (1999). *Web wisdom: How to evaluate and create information quality on the Web*. Mahwah, NJ: Erlbaum.
- Elgin, Ben (2004). *Why the world's hottest tech company will struggle to keep its edge*. Business Week, May 3, 2004., pg. 82-85.
- Fogg, B. J. et.al. (2001). *What makes web sites credible? A report on a large quantitative study*. Persuasive Technology Lab., Stanford University.
www.webcredibility.org.
- Harris, C. (1996). *An Internet Education*. Belmont, CA: Wadsworth Publishing.
- Huntley, H. (2000). *Internet changing the way many do business*. *St Petersburg Times*, p14.
- Johnson, T. J. and Kaye, B.K. (1998) *Cruising is believing: Comparing internet and traditional sources on media credibility*. *Journalism and Mass Communication Quarterly*.

- Kurland, D. J. (1996). The net, the web, and you. Belmont, CA: Wadsworth Publishing
- McLaughlin, J. & Pavelka, D. (2005). Assessing the integrity of web sites providing data and information on corporate behavior. Journal of Education for Business, 80, 6. pp. 333-337.
- Negecio, U. (2004) Hispanic Business Wire, Hispanic Internet Market , Nov. 2004
- Pew Institute (2005). *Hispanics: A people in motion*. The Mainstream of Online Life. (Part of the Pew Research Center Trends 2005 Report), The Pew Internet and Life Project, 78 pp.
- Princeton Survey Research Associates (2002). *A matter of trust: what users want from web sites*. Consumer Web Watch Transparency Survey, January 2002, 18 pp.
- Tristani, G. (2001) , *Hispanics in the digital economy: Harnessing the promise of the internet*. Hispanic Internet Conference Session.
- U.S. Census Bureau (2000) Census of Population, Public Law 94-171 Redistricting Data File. Updated every 10 years. (<http://factfinder.census.gov>)
- Wilmington News Journal (2005). *Hispanic population growing exponentially* (Editorial), June 9, 2005, A1 and A14.