

**Strengthening Social Capital through Computer-mediated Community
Participation**



Building an exclusive online professional and social networking community for The
National Association for Multi-ethnicity in Communications' Executive Leadership
Development Program members

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NAMIC is a 501(c)(6) trade association that educates, advocates and empowers for multi-ethnic diversity in the telecommunications industry. NAMIC was founded in 1980 and currently has a staff of ten that creates and implements national programs for its more than 1,500 members in 17 national chapters. NAMIC's Executive Leadership Development Program (ELDP), in association with UCLA Anderson School of Management, was launched in Fall 2001 as a result of a NAMIC research study that found that people of color are severely underrepresented in the cable industry's executive suites. ELDP provides education and mentor programs designed to help members develop their potential to gain access to the industry's executive level positions.

The ELDP targets upper-middle managers who have a minimum of two years experience at the director level and above from the telecommunications industry, and who are seeking senior-level positions. Their superiors who believe that their performance and potential puts them on track for future executive-level responsibilities must nominate members. Only a select few applicants each year are granted entrance to and graduate from the ELDP, which develops a pipeline of leaders of color who will be well prepared to take the next steps up the executive ladder.

The core values of the ELDP curriculum are areas that are critical to sustained success in the telecommunications industry: marketing and financial analysis; corporate strategy; organizational behavior; managing innovation; operations management; achieving optimal results from diverse teams; communication strategies in a multi-cultural context; change management; and entrepreneurship. Additionally, participants spend time in guided examination of individual leadership styles, strengths and "blind spots," emotional intelligence, and the unique experiences that executives of color have

with power—acquiring it; using it wisely; comprehending in all its cultural and organizational complexity. (NAMIC.com)

Project Site / Project Description

Consultants created the NAMIC web site, NAMIC.com, and NAMIC administrative staff updates site content items as needed. The site is a largely informational site that prospective members, current members and donors can get information about past and present NAMIC events and initiatives. While the site does have a job bank component supplied through a third-party provider, NAMIC.com generally lacked any substantial interactivity. Because NAMIC does not have an internal IT department, they periodically solicit consultants to support various technology initiatives.

James Jones, Senior Director of NAMIC Education Programs and ELDP programs director, required a membership-only virtual community area on NAMIC.com that is exclusive to the ELDP alumni, and offers access to group e-mailing, discussion boards, event calendars, and blog creation tools. EDLP exclusivity of the virtual community on NAMIC.com is expected to support and reinforce the unique ties of the ELDP members as well as sustain the energy and enthusiasm that the alumni experienced during their coursework.

Of major importance to NAMIC is that the proposed online community imparts to the user at all levels of functionality and look-and-feel the NAMIC.com experience. Therefore, the virtual community was implemented with NAMIC's high-level

requirement that the pages display a seamless visual design into the current NAMIC.com web site.

Research Design

Methodology

An online survey is the instrument used to establish a quantitative basis for assessing the effectiveness of an ELDP online community to strengthen social capital. Additionally, answers that respondents provide to survey questions determined the structure and content of the online community. The sample size of the survey was the entire ELDP database of past and present participants. The entire database was used because the historically low response rate for Internet surveys makes it advantageous to deploy the survey to as large a sample size as is possible.

Variables

There are four independent predictor (x) variables that will determine the dependent (y1) variable. The dependent variable is an ELDP online community that strengthens social capital. The four major types of independent variables are Internet activity (x1), community behavior (x2), motivators for computer-mediated community participation (x3), and participatory community-centered development (x4).

Internet activity variables

No distinction was made between work-related Internet activities and non-work related because of the potential for increased social capital when participating in informative networks as well as collaborative networks.

Overall Time spent online. The overall time spent online was used as a baseline measurement against the time spent on individual Internet activities.

Time spent online in social activities. The time spent online in social activities is positively related to social capital

Time spent online in non-social activities. The time spent online in non-social activities is inversely related to social capital

Types of computer-mediated community activities engaged. Online community activities are positively related to social capital. Roles vary by the specific community activity of e-mail, chat, discussion board, bulletin board or blog.

Online community behavior.

Online community behavior. Each participant enacts a behavioral role in communities of bulletin, chat and discussion boards that helps to determine the direction of discussion. The roles are enacted through the behaviors of answer person behaviors, question behaviors, and discussion behaviors.

Motivators for computer mediated community participation variables

Organizational motivation. CMC that takes place in the context of an organizational structure provides additional motivators for users to contribute. Organizational motivation measures participants' interest in contributing to the organization's success and also to solving problems of others.

Information Seeking. Information management features help bloggers to gather the information they need in a convenient way and information searching is a motivation that drives bloggers to create and manage their blogs.

Participatory Community-centered Development

Designing Usability / Supporting sociability. Designing usability and supporting sociability involves the user in the community design and policy and procedure development processes to ensure that the community experience is user-centered.

Validity

Construct Validity

The construct that is being measured is the effectiveness of the ELDP online community to strengthen social capital. The instrument being used to measure the construct are the variables that will reveal the extent that ELDP members will engage the latent ties of the ELDP in the online virtual community to result in increased social capital. Each of the variables measures an aspect of the tendency to utilize computer-mediated community to affect social capital.

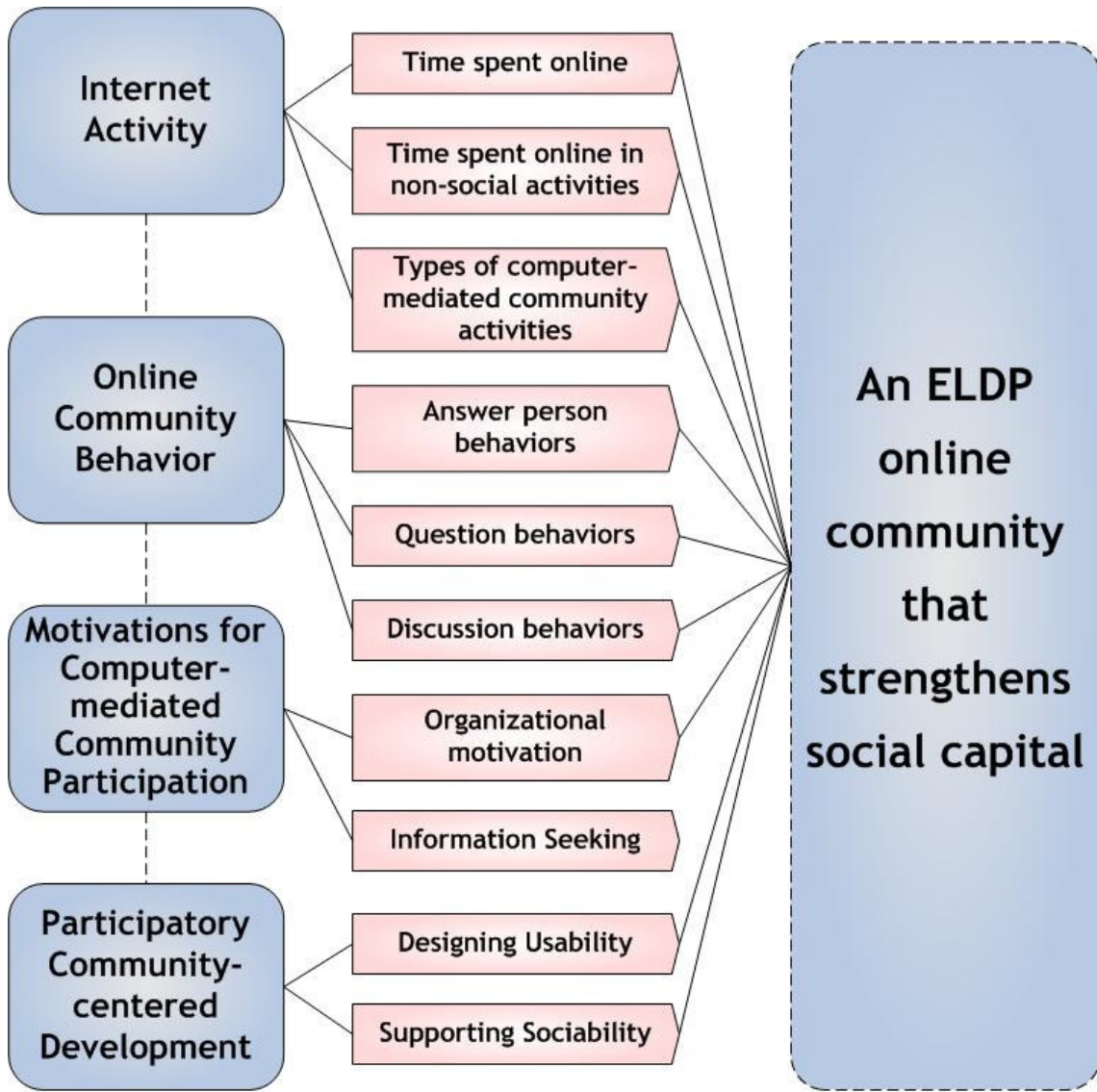


Fig. 3. Model: An ELDP online community that strengthens social capital

Content Validity

The instrument to be used is an online survey to be deployed to the entire ELDP alumni database. The questions in the survey provide appropriate content for measuring the construct.

Table 2
ELDP Alumni Online Community Survey Questions

<i>Variable</i>	<i>Question</i>	<i>Literature Review</i>	<i>Question Type</i>
Internet Activity Variables			
Overall time spent	How much time do you	The overall time spent	Multiple

online	spend online?	online will be used as a baseline measure	choice
Time spent online in non-social activities	How much time do you spend online engaged in non-social activities?	Time spent online in non-social activities is inversely related to social capital	Multiple choice
Types of computer-mediated community activities engaged in	How much time do you spend online engaged in social activities (e-mail, chat, discussion board, social networking site)?	Time spent online in social activities is positively related to increased social capital	Multiple choice
	What types of community activities do you participate in online (check all that apply) E-mail, chat, discussion board, blog, social networking	Time spent online in social activities is positively related to increased social capital	Multiple choice
	If you had more time to spend online, in what types of community activities would you participate? (check all that apply) E-mail, discussion board, blog, social networking		Multiple choice
	How often do you read blogs?		Multiple choice
Do you currently author a blog or have you authored one in the past?	Yes / No		
Online Community Behavior Variables			
Answer behaviors	In discussion or bulletin boards, I often provide answers to other's requests for information	Answer people propel the discussion and generally keep the progress in the group	Likert, 5 scale
Question behaviors	In discussion or bulletin boards I often post questions	Question asking related behavior is defined as explicit requests for information	Likert, 5 scale
Discussion behaviors	In discussion or bulletin boards, I often contribute to discussion threads	Discussion related behaviors include exchanges such as playful banter, story-telling, bragging, confrontation, announcement and promotion of events, products, or services	Likert, 5 scale
Motivators for CMC Participation Variables			
Organizational motivation	It is important to me to help other NAMIC members resolve problems	Affinity strength for the ELDP as an organization	Likert, 5 scale
Information seeking	With what blogging software are you familiar?	The presence or absence in blogging software or blog services of specific features that encourage information seeking is determined in part by the blog software	Multiple choice
Participatory Community-centered Development Variables			

Designing Usability	Would you be willing to participate in usability testing for an ELDP online community website?	Designing usability and supporting sociability involves the user in the community design and policy and procedure	Yes / No
Supporting sociability	Would you like to help establish policies and procedures for an ELDP online community	processes to ensure that the community experience is user-centered	Yes / No

Reliability

The survey questions that investigate ELDP member's Internet usage patterns and habits, their behavior patterns in computer-mediated community, and their motivations for computer-mediated community participation are based on the literature review of previous studies and theory discussion herein, and the question set provides a reliable basis to evaluate the construct.

Survey Findings

Analysis

The survey was distributed to the ELDP in two separate deployments. The 2008 ELDP class convened in Los Angeles in February and each student filled out and submitted a paper version of the survey. At the same time, the survey was deployed on the Internet to the remainder of the ELDP alumni base. The survey was online and collecting responses from February 25 through March 18. There were 32 surveys returned from the 2008 ELDP class and 16 responses received from the Internet survey deployment. The 48 responses represent 23% of the total 210 ELDP members. The survey results were quantitatively analyzed for measures of central tendency and correlation.

Time Spent online: The time that respondents spend online is the total time spent online during the course of a week, at work and at home. No distinction was made between work-related Internet activities and non-work related activities because of the potential for increased social capital when participating in informative networks as well as in collaborative networks. All respondents use the Internet during the course of an average week, with each respondent logging in at least 6 hours per week. 26% of respondents spend less than 10 hours but more than 6 hours per week online, while 37% spend more than 20 hours a week online. The remaining 37% spend between 11 and 20 hours per week online.

Non-social activities: 50% spend between 11 and 15 hours per week online engaged in non-social activities and 23% of respondents spend 20 hours or more per week engaged in non-social activities. 20% spend 5 hours or less per week engaged in non-social activities. The remaining 6% spend between 16 and 20 hours per week engaged in non-social activities.

Social Activities: 77% of respondents spend 10 hours or less each week socializing online. Of the 23% that spend more than 11 hours per week socializing online, 17% spend more than 16 hours per week online engaged in social activities. The remaining 6% spend between 11 and 15 hours engaged in social activities.

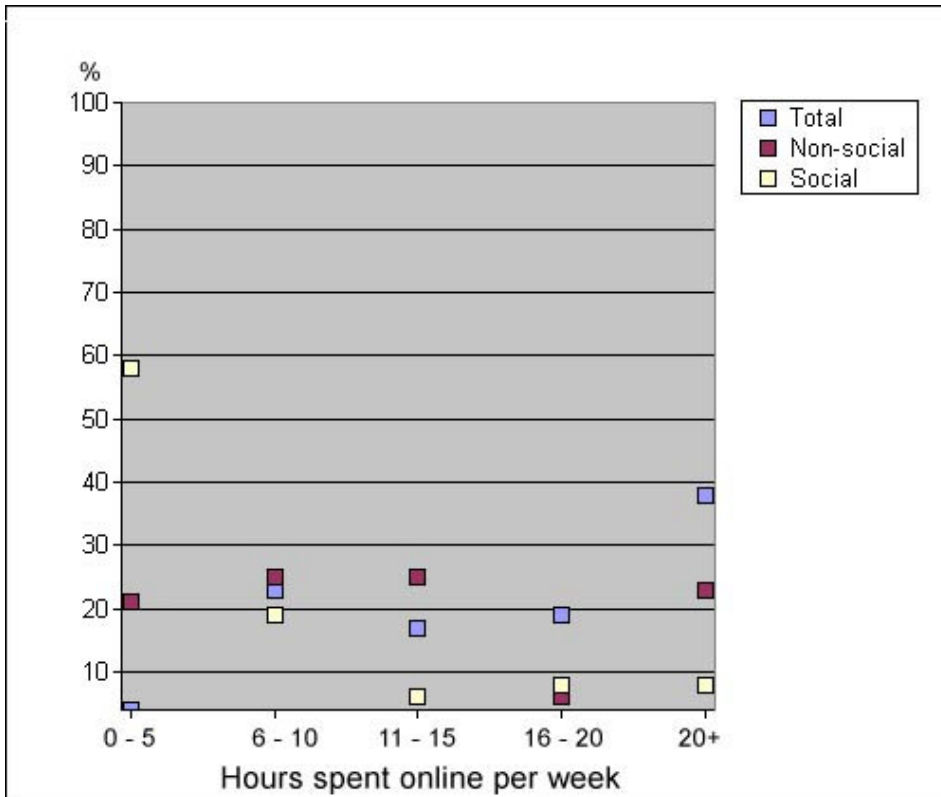


Fig. 4. Comparison of the amount of hours per week ELDP members spend in total time engaged in all activities, time engaged in non-social activities, and time engaged in social activities

In comparing the time spent online engaged in social activities to the time spent online engaged in non-social activities, time spent online engaged in social activities for respondents is lower than time spent online engaged in social activities. That the percentage of respondents who spend more than 20 hours per week online engaged in non-social activities is higher than the percentage who spend more than 20 hours per week engaged in social activities was expected since the time recorded does include time spent online at work. As a result, the overall time spent online strongly positively covariates with the time spent engaged in non-social activities ($r^2 = .76, p < .05$). There is also a moderately strong correlation between the overall amount of time spent online and time spent engaged in social activities ($r^2 = .62, p < .05$). As well, there is a moderate correlation between the amount of time spent on social activities with amount of time

spent on non-social activities ($r=.50$, $p < .05$). Both the .62 correlation between time spent in social activities and the overall time spent online, and the .50 correlation between time spent on social and non-social activities supports ELDP members' ability to increase social capital while engaged in both collaborative and informative networks.

Types of community activities engaged online: The types of community activities that respondents engage in were recorded as email, discussion board, social networking and blogs. Most respondents use email as their primary community social activity, at 98%, followed by some form of social networking at 48%, and participation in discussion boards at 27%. Respondents' participation in blogs is 17%. That email is the primary community activity and at a significant level is not surprising given that email is a component of both collaborative and informative networks, which take into account participation at work and in leisure time.

Types of community activities respondents would like to engage online: For the types of community activities respondents would engage if they had more time, only 35% say they would like to continue with email as their primary community tool. 54% would like to engage in social networking, and 46% would use discussion boards more often. 42% report that they would like to participate in blogs. The number of respondents who would continue to use email as their primary community activity if they had more time for other community activities (35%), represents a 65% reduction in from the number of respondents who presently use email as their primary community activity (98%). If respondents had more time they would engage in all offered aspects of community, and they would engage them at relatively similar rates. Results show a range of 19 between

percentages for the types of community activities ELDP members desire to engage, compared with a range of 50 for community activities that respondents currently engage.

Blogs: Most respondents rarely or never read blogs; 38% of respondents report that they read blogs once in a while and 29% never read blogs. Of the respondents who do read blogs, 17% of read blogs several times a week. 8% read blogs several times a day, and also 8% read blogs several times a month.

7% of respondents either currently author a blog or have authored one in the past. The rate of 7% for ELDP respondents who currently author or have authored a blog does represent a small percentage of the ELDP membership; however, placed in perspective, this percentage does favorably compare to the overall percentage of people who participate in blogs on the Internet. The 7% ELDP response rate for current or past blog authoring is not out of line with the rate of 8% of all Internet users who keep a blog.

(Huang et al. 473)

Motivation:

Information Seeking: 33% of respondents are familiar with blogging software. Of this 33%, 38% are familiar with more than one type of blogging application.

Online Behaviors: 31% of all respondents engage in answer person behavior by providing answers to others' requests for information; 23% agreed, and 8% strongly agreed. 31% of all respondents agreed or strongly agreed that they often post questions on discussion or bulletin boards, while 41% agreed or strongly agreed that they often contribute to discussions.

Organizational Motivation: 88% of respondents agree or strongly agree that it is important to them to help other NAMIC members resolve problems. For all respondents who contribute to discussions by exhibiting answer, question or discussion related

behaviors, their contribution to discussions displays a strong correlation with the motivation to help NAMIC members resolve problems ($r^2 = 1.0$, $p < .05$).

Discussion

The .62 correlation between social activities and time spent online is positively related to interpersonal connectivity. The positive correlation predicts that ELDP members may increase social capital through their interaction in online community, and also, they can use their online social networks to help convert online ties to offline ties. That the online ties may be converted to offline ties is particularly relevant for ELDP members because of the strength of the ELDP latent tie status. Tie conversion from online to offline status has implications for software applications selection in that selected applications will include functionality that provides for social networking—a community activity that 54% of ELDP desire to participate. ELDP online community social networking will be in the form of an event calendaring application. The calendar application will be a conduit for tie conversion by presenting opportunities for offline meetings in which users post offline industry and non-industry related events.

Of the five time periods surveyed in questions one through three, the time period wherein the percentage for total time spent online (23%), time spent online in social (19%) and time spent online in non-social (25%) activities show little variation is the 6 – 10 hours per week time period, which displays a range of 6. The range of 6 predicts that the 23% of ELDP members who spend between 6 – 10 hours per week online will spend an almost equal amount of this time divided between social and non-social activities. The implications are that not only does this 23% of ELDP members display a markedly high

ability to increase social capital but also they will provide a solid base for content contribution to the ELDP online community.

The percentage of ELDP members who exhibit answer person behavior is strong at 31%, and surpasses the 18% answer person-related behaviors exhibited by contributors in Wesler et al.'s study of community behaviors. This higher than average percentage for answer person behavior exhibited by the ELDP predicts that there will be ample contributors to discussion and blog postings, thereby propelling and continuing conversation threads throughout the ELDP online community.

Email capability will be a component of all selected applications because email is currently and will likely remain the primary way that ELDP members engage community. Members can receive email notifications and reminders for community events and postings, and thereby participate in community on their wireless and handheld devices. Additionally, since NAMIC affiliation drives members' desire to help other ELDP alumni resolve problems, organizational affiliation can support online community involvement, thereby helping members to expand on their desire to branch out into more varied forms of community participation beyond email as their primary community tool.

33% of ELDP are familiar with blogging software and 7% have used blog software to author a blog. Therefore, the blog application that is selected for implementation must not only contain the basic functionality that users have come to expect in a blog application, but also the blog application must meet the unique requirements of the ELDP members. Specifically, because of ELDP members' engagement of email as their primary community activity, the blog application must include an email component that deploys alerts to members when new blog items are

posted. And also, since ELDP members do not have much time to spend on community activities, the blog application must allow users to contribute on their mobile and handheld devices.

The amount of time that ELDP members spend engaged in online social activities (77% of ELDP spend 10 hours or less per week) provides implications for usability testing in that the testing must stress clarity of information architecture and speed of information access issues. Also, for all applications selected for implementation, user features for information access and retrieval must be constructed as clear and accessible components of information architecture.

Appendix A: Survey

Executive Leadership Development Program Online Community Participation Survey

Executive Leadership Development Program (ELDP) participants and alumni are being invited to be a part of an on-line community created especially for them. The brief survey below will give you an opportunity to provide us with information about your on-line habits. Please take a few minutes to answer the questions and, by doing so, help lay the foundation for a vibrant ELDP portal.

Section I. Your online habits

(Questions 1 through 3 ask about time spent online both at work and at home)

1. How much time do you spend online?

- 0 - 5 hours/week
- 6 - 10 hours/week
- 11 - 15 hours/week
- 16 - 20 hours/week
- 20+ hours/week

2. How much time do you spend online engaged in non-social activities?

- 0 - 5 hours/week
- 6 - 10 hours/week
- 11 - 15 hours/week
- 16 - 20 hours/week
- 20+ hours/week

3. How much time do you spend online engaged in social activities (e-mail, chat, discussion board, blog or social networking sites)

- 0 - 5 hours/week
- 6 - 10 hours/week
- 11 - 15 hours/week
- 16 - 20 hours/week
- 20+ hours/week

4. What types of community activities do you participate in online (*check all that apply*)

- E-mail
- Discussion board
- Blog
- Social networking

5. If you had more time to spend online, in what types of community activities would you participate (*check all that apply*)

- E-mail
- Discussion board
- Blog
- Social networking

6. How often do you read blogs?

- Several times a day
- Several times a week
- Several times a month
- Once in a while
- I never read blogs

7. Do you currently author a blog or have you authored one in the past?

- Yes
- No

8. With what blogging software are you familiar? (*check all that apply*)

- Typepad
- Blogger
- LiveJournal
- WordPress
- None
- Other

If other, please specify _____

Section II. Your participation in online community

1. In discussion or bulletin boards, I often provide answers to other's requests for information

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

2. In discussion or bulletin boards I often post questions

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

3. In discussion or bulletin boards, I often contribute to discussion threads

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

4. It is important to me to help other NAMIC members resolve problems

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Section III: Online Community Design and Support

1. Would you be willing to participate in usability testing for an ELDP online community website?

- Yes: Please provide your e-mail address: _____
- No

2. Would you like to help establish policies and procedures for an ELDP online community?

- Yes: Please provide your e-mail address: _____
- No

Please provide any comments that you would like to share about your online community experiences
