

## AN EMPIRICAL STUDY ON COMPUTER NETWORKING AND SOCIAL NETWORKING FOR BUSINESS DEVELOPMENT RESEARCH SCHOLAR:

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### Abstract

Computer Networking is the art of connecting two or more computers in order to share peripherals (resources) e.g. printers, faxes, photocopiers, CD ROM, etc. and data, hence a computer network will be the interconnection of two or more computers. A Computer network can also be defined as any collection of independent computers that exchange information with each other over a shared communication medium. A computer network consists of a group of computers connected together by a specific type of transmission media (the cable that is used to transmit data across the network), network adapters, and network operating systems that support communication protocols. First we had the industrial revolution in the 19th and 20th century, which swept the whole world. The computer revolution is said to be the next big thing which is going to downsize the achievements of the earlier revolution. Computer revolution has arrived in part and parcels in the 21st century and it is just going to grow bigger by the minute. Every minute at least a hundred PC's are bought all around the world and majority of them are nowadays connected to the internet. When it's all about connecting two or more computer systems, in different parts of the world, bang comes the need for networking. Networking allows various intelligent devices like computers, PDA, mobile phones to communicate with each other either through physical wires or wireless signals. This is nothing but the much used word "convergence" of technology. We all send emails, don't we? But have we ever wondered how this email knows where to go? Well devices like routers act like postmen, who look at the IP address the email address originated from and they then forward it to the destination IP address, who is the actually intended recipient of the email. Networking basically explains one how this sequence of occurs happens in real time world and as to how the data packets reach where they have to. Software and Networking are inter-dependant. A Client Server application created by the tireless programmer can run only on a network, formed by your hardware guy, whose majority of the time goes into tripping about CAT5 cables and sorting them out. The operating system

(network operating system) used by the system administrator is actually the successful execution of the code of a software programmer, at runtime. Currently the software field is very much saturated, as all that one requires in the software field is good logic, imagination and creativity. Hence even if you are not from a technical background as such, still you can pick up a course on say C++ or Java and climb the steps of being a coder from day one itself. But networking is all about troubleshooting in real life situations. No matter how badly one messes up with a computer system, the networking guy has to get the machine up and running ASAP. In the forthcoming articles in this section, you will get to know more about the standard models over which the internet was built, a preview on the various devices that make a network work, like your hub, router, repeater, switch and also about the various networking operating systems. Useful tips regarding cracking certifications like CCNA, MCSE will also be given.

**Key Words:-** Computer Networking, Social Networking Sites(SNS), Multi National Companies(MNCs), Business Development(BD), SPSS, Factor Analysis, Chi-Square, ANOVA.

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## Objectives

1. To understand the computer networking with social networking in Multi National Companies (MNCs).
2. To identify the impact of computer networking on Business development in Multi National Companies (MNCs) companies for productivity enhancement.
3. To identify the factors which link the computer networks and business development?
4. To standardize the factors that can be used for transforming business through computer networks.
5. To correlate computer networks with productivity enhancement & profits.

## Hypothesis

H0: There is no significant correlation between computer networking and social net working like BD developmental activities and methods, system maintenance and monitoring and Business development evaluation.

H1: There is significant correlation between computer networking and social net working like BD developmental activities and methods, system maintenance and monitoring and Business development evaluation.

H0: Some factors has not having significant weight age in transforming social net works into computer networks like system design, BD knowledge capturing and storing, management support, and infrastructure.

H1: Some factors are having significant weight age in transforming social net works into computer networks like system design, BD knowledge capturing and storing, management support, and infrastructure.

H0: Some factors like system implementation, critical success factors for BD, information technology and measurement in the business development process cannot be standardized with desired level of factors.

H1: Some factors like system implementation, critical success factors for BD, information technology and measurement in the business development process can be standardized with desired level of factors.

H0: It is not possible to prepare a BD model without employee satisfaction, BD drivers and system tools

H1: It is possible to prepare a BD model without employee satisfaction, BD drivers and system tools

H0: There is no significant variation among current position of the employees and their services, location branches, operations, ownership, gender, age and qualification.

H1: There is significant variation among current position of the employees and their services, location

branches, operations, ownership, gender, age and qualification

## Research Methodology

Statistical Package for Social Science 20(SPSS 20) is used as the main statistical technique and data collected through questionnaire survey. The questions in the survey are self-designed. Five point scale was used starting with strongly disagree as 1 and strongly agree as 5 to measure the effects of the Senior managers, Assistant and deputy managers, supervisors and other staff. Nine questions are designed for demographics, age, qualification, ownership, current position, location, operations and experience. Total number of questions is designed 74 are segment into Employee satisfaction, Activities and methods, System design, System implementation, Maintenance and monitoring, BD system evaluation, BD knowledge capturing and storing, System tools, Critical success factors for BD, Management support, Information technology, Reusing and sharing BD process ,Measurement, Infrastructure and Drivers for BD and integration. Factor analysis for satisfaction and drivers for business development and integration are used. For remaining items Chi-square and ANOVA are used.

## Sampling Design

Total of 100 questionnaires were distributed to different professionals to express their opinion. The numbers of respondents are 100. The survey intentions are specified to the respondents.

**Table 1: Sampling frame**

S. No.	Description	Given	Responded	Percentage
1	Sr. managers	400	300	72
2	Assistant managers	100	60	14
3	supervisors	100	30	7
4	Others	100	35	7
5	Total	700	425	100

## Review of Literature

**Selected challenges in computer networking: (Sponsored by: IEEE Computer Society, 06 Aug, 2002)**

The convergence of computing and networking is nowhere more evident than in the phenomenal growth of the World Wide Web. In another sense, though, computer networking is being pulled in two opposite directions. On the one hand, the Web's popularity and growth has been fueled largely by desktop applications consuming bandwidth-intensive images and video. On the other hand, thin-client

computers are becoming more commonly used as edge-of-network devices, often connected by wireless technology. There is also an increasing mismatch between fiber-optic transmission bandwidths and computer speeds, pushing computing further away from the network core. Are there ways to close, or at least manage, this growing schism-whether through novel hardware solutions or the programmability of network infrastructures? Can we better integrate these edge-of-network devices and make them full-fledged network participants? The paper discusses programmable network challenges.

**Teaching computer networking with the help of personal computer networks: (Rocky K. C. Chang, 2000-2009)**

This paper describes an "experiential" learning approach to teaching a foundational course on Computer Networking. In addition to the traditional laboratory sessions and analytical problem-solving, The author has introduced a class project based on personal computer networks for the last three years. Each project group sets up and owns an IP private network throughout the course, and they perform various experiments on it to verify and test the networking principles learned from the textbooks and lectures. The students' feedbacks collected so far are extremely positive. Not only they can acquire practical skills during the process, they are able to better understand the abstract networking concepts and protocols through their working experience with the personal computer networks.

**Computer Networks as Social Networks :( Barry Wellman, 14 Sep 2001)**

Computer networks are inherently social networks, linking people, organizations, and knowledge. They are social institutions that should not be studied in isolation but as integrated into everyday lives. The proliferation of computer networks has facilitated a de-emphasis on group solidarities at work and in the community and afforded a turn to networked

societies that are loosely bounded and sparsely knit. The Internet increases people's social capital, increasing contact with friends and relatives who live nearby and far away. New tools must be developed to help people navigate and find knowledge in complex, fragmented, networked societies.

**Emerging Platform for E-Crime: Issues of Social Networking Websites in India :( Itisha Yadav1 & Fatima Quraishi)**

Ironically, the SNS (Social Network Services) which were conceived to develop a healthy relationship between netizens is used as a tracking device to follow the behavior and actions of many. Very valuable information is exposed on these highly compromised platforms. There is also a perceived privacy threat in relation to placing too much personal information in the hands of large corporations. This paper elaborates upon issues such as safety implication, privacy, social capital, youth culture and education and legal implications. Additionally, the working of Social Networking Sites with law enforcement agencies and also the pigeonholes in the privacy policies of some social networking sites are carefully perused. Furthermore, four components of data protection and privacy regime of India, namely, (a) Constitution of India (b) The Information Technology Act, 2000 and the subsequent Amendment Act passed in 2008 and (c) Draft Reasonable Security Practices Rules, 2011, have also been deliberated upon.

**Primary Data and Analysis**

**Hypothesis 1:-**

There is no significant correlation between computer networking and social net working like BD developmental activities and methods, system maintenance and monitoring and Business development evaluation.

**Table 1**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.207 <sup>a</sup>	.043	.034	1.249	.043	4.663	4	415	.001

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	29.087	4	7.272	4.663	.001 <sup>b</sup>
1 Residual	647.113	415	1.559		
Total	676.200	419			

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

	(Constant)	2.210	.264		8.384	.000
	feedbacks	.127	.082	.095	1.545	.123
1	differences	.011	.088	.008	.123	.902
	monitoring	-.282	.084	-.220		.001
	various factors	.181	.085	.146	2.122	.034

a. Dependent Variable: ownership

Table 1 pertains to ownership to different methods and activities in business development. The dependent variable y is ownership and constant c is 2.489 and x1 is conducting questionnaire, x2 identifying the data, x3 identifying the business process, x4 business development tools. So the equation can be expressed as  $Y = 2.489 + .180 x1 + .102x2 + .159 x3 - .479 x4$  from the equation it is inferred that the estimated increase by .034 (adjusted R square) assessing all the variables to be constant. The measure of strength of association in the

regression analysis is given by the coefficient of determination denoted by R square. .034 which shows that 3.4 percent of variation in ownership is explained by 4 factors.

**Hypothesis 2:-**

Some factors has not having significant weight age in transforming social net works into computer networks like system design, BD knowledge capturing and storing, management support, and infrastructure.

**TABLE 1:**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.187 <sup>a</sup>	.035	.028	1.252	.035	5.038	3	416	.002

ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	23.708	3	7.903	5.038	.002 <sup>b</sup>
	Residual	652.492	416	1.568		
	Total	676.200	419			

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.619	.281		5.759	.000
	defining aims	.121	.070	.097	1.729	.085
	different methods	-.147	.086	-.100	-1.700	.090
	action plan	.233	.088	.162	2.661	.008

Table 1 pertains to ownership to system design in business development. The dependent variable y is ownership and constant c is 1.619 and x1 is defining aims x2 identifying the different methods x3 identifying the action plan. So the equation can be expressed as

$Y = 1.619 + .121 x1 - .147x2 + .233 x3$  from the equation it is inferred that the estimated increase by .035 (adjusted R square) assessing all the variables to be constant. The measure of strength of association

in the regression analysis is given by the coefficient of determination denoted by R square. .035 which shows that 3.5 percent of variation in ownership is explained by 3 factors for business development and system design.

**Hypothesis 3:-**

Some factors like system implementation, critical success factors for BD, information technology and measurement in the business development process cannot be standardized with desired level of factors.

Table 1										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. Change	F
1	.225 <sup>a</sup>	.051	.044	1.242	.051	7.379	3	416	.000	
ANOVA <sup>a</sup>										
Model		Sum of Squares	Df	Mean Square	F	Sig.				
1	Regression	34.164	3	11.388	7.379	.000 <sup>b</sup>				
	Residual	642.036	416	1.543						
	Total	676.200	419							
Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.			
		B	Std. Error	Beta						
1	(Constant)	1.513	.264			5.735	.000			
	prototype	.157	.098	.110		1.603	.110			
	BD offices	.253	.095	.190		2.672	.008			
	embedding	-.180	.080	-.134		-2.240	.026			

Table 1 pertains to ownership to system implementation in business development. The dependent variable y is ownership and constant c is 1.513 and x1 is defining prototype ,x2 identifying the business development offices x3 identifying the business development embedding activities. So the equation can be expressed as  $Y = 1.513 + .157 x1 + .253x2 - .180 x3$  from the equation it is inferred that the estimated increase by .051 (adjusted R square) assessing all the variables to be constant. The

measure of strength of association in the regression analysis is given by the coefficient of determination denoted by R square. .051 which shows that 5.1 percent of variation in ownership is explained by 3 factors for business development and system implementation.

**Hypothesis 4:-**

It is not possible to prepare a BD model without employee satisfaction, BD drivers and system tools.

**Table 1  
KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.785
Bartlett's Test of Sphericity	Approx. Chi-Square Df Sig.
	13189.269 253 .000

Factor	Description	Factor loading	%variance	Cumulative
Business development drivers	Business development sharing	.701	44.75	44.75
	Employee expertise in BD	.823		
	Sharing employee expertise	.864		
	Identification of best practices internal and external	.906		
	Reduction of cost and time	.877		
	Enhancing quality of work	.937		
	Providing competitive advantage	.888		
	Helping Sr. managers to avoid many problems	.918		
Presenting accurate and timely BD plan	.863			

	Providing effective tool to train juniors	.777		
	Enhancing relation and co-ordinations with customers	.924		
	Encourages for continuous BD plan improvement	.888		
	Reducing the rework and save time	.903		
Report generation	Using the manuals	.826	13.106	57.856
	Using the system for analysis	.701		
	Preparing the document	.824		
	Using the earlier photos and videos for BD	.771		
Employee satisfaction	Satisfied with the current organization	.772	11.876	69.732
	Satisfaction with current outlooks	.769		
	Satisfied with current security	.763		
	Satisfied with working environment	.664		
collaboration	Profit sharing	.806	8.113	77.845
	Job rotation	.703		

Table1 represents the extracted from satisfaction, system tools and drivers of the business development. By using principle component rotation the number of factors extracted are four namely business development drivers, report generation, employee satisfaction, and collaboration. Extracted 4 factors account for 77.84 % of the variance. Business development sharing, .701, Employee expertise in BD .823, Sharing employee expertise .864, Identification of best practices internal and external .906, Reduction of cost and time .877, Enhancing quality of work,.937, Providing competitive advantage .,888, Helping Sr. managers to avoid many problems,.918, Presenting accurate and timely BD plan,.863, Providing effective tool to train juniors,.777, Enhancing relation and co-ordinations with customers,.924, Encourages for continuous BD plan improvement.888, Reducing the rework and save time.903 combining all the factors commonly

named as business development drivers, in the second factor loadings are using manuals .826, using system for analysis .701, preparing document .824 using the earlier photos and videos for business development is .771 combinedly named as report generation. The third factor loadings are satisfied with the current organization .772, Satisfaction with current outlooks .769, Satisfied with current security .763, Satisfied with working environment .664. Combining all the four the combined name for these factors is employee satisfaction. The fourth factor loadings are related to business development with collaboration profit sharing .806, job rotation .703 combining these two factors named as collaboration. The KMO value and bartellets values clearly indicates the factors are significant.

## Demographics

**Table 1current position \* length of service Cross tabulation**

		length of service				Total
		1	2	3	4	
current position	1 Count	14	14	28	0	56
	1 % within current position	25.0%	25.0%	50.0%	0.0%	100.0%
	2 Count	28	0	0	0	28
	2 % within current position	100.0%	0.0%	0.0%	0.0%	100.0%
	3 Count	42	28	0	14	84
	3 % within current position	50.0%	33.3%	0.0%	16.7%	100.0%
	4 Count	112	28	112	0	252
	4 % within current position	100.0%	25.0%	100.0%	0.0%	100.0%

	% within current position	44.4%	11.1%	44.4%	0.0%	100.0%
Total	Count	196	70	140	14	420
	% of Total	46.7%	16.7%	33.3%	3.3%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	156.167 <sup>a</sup>	9	.000

Table 1 pertains to position of the respondents to length of service. Respondents position is manager, deputy manager, supervisor and other, and length of the services are <3 years , 3-5 years, 6-10 years and more than 10 years. Majority of the managers 50 (percent) are having experience between 6 – 10 years , followed by cent percent of deputy managers have

the experience of less than three years , majority 50 (percent) of supervisors are having experience of less than 3 years finally others (44.4 percent) are having experience of less than 3 years and are having in between 6-10 years. The association is clearly indicated by the chi-square value 156.167 at df 9 p=.000 clearly indicates the signification association between position to length of service.

**Hypothesis 5:** There is no significant variation among the current position of the employees and service, location, branches, operations, ownership, gender age and qualification. Alternative hypothesis: There is a significant variation among the current position of the employees and service, location, branches, operations, ownership, gender age and qualification

**Table 1: location \* length of service Cross tabulation**

		length of service				Total	
		1	2	3	4		
location	1	Count	182	70	140	0	392
		% within location	46.4%	17.9%	35.7%	0.0%	100.0%
location	2	Count	14	0	0	14	28
		% within location	50.0%	0.0%	0.0%	50.0%	100.0%
Total		Count	196	70	140	14	420
		% within location	46.7%	16.7%	33.3%	3.3%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	211.071 <sup>a</sup>	3	.000

Table 1 pertains to location versus the respondents. A slightly less than 50 percent of managers are working in urban areas followed by fifty percent of managers and supervisors are working in urban and rural areas.

The association which is indicated by the chi-square value 21.071 at 3 degrees of freedom and p is .000 which clearly shows the areas of working to the positions are significant.

**Table2 current position \* number of branches Cross tabulation**

		number of branches			Total	
		1	2	3		
current position	1	Count	14	0	42	56
		% within current position	25.0%	0.0%	75.0%	100.
	2	Count	0	0	28	28

	% within current position	0.0%	0.0%	100.0%	100.0%
	Count	14	0	70	84
3	% within current position	16.7%	0.0%	83.3%	100.0%
	Count	14	28	210	252
4	% within current position	5.6%	11.1%	83.3%	100.0%
	Count	42	28	350	420
Total	% within current position	10.0%	6.7%	83.3%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	44.178 <sup>a</sup>	6	.000

The table2 pertains to the staff working in different branches 1 indicates number of branches <2 , 2 indicates braches 2-4 3 indicates braches more than 4. Majority 75 percent of the managers having experience in more than 4 followed by deputy managers are having work experience in 2-4 branches majority 83.3 percent of supervisors are from more

than 4 branches finally majority 83.3 percent are from others. The association between the number of branches position of the employees has significant which is indicated by the chi-square value 44.178 at 7 degrees of freedom and p is.000. Which is clearly showing the association is significant.

**TABLE 3 current position \* operations of comp Cross tabulation**

		operations of comp			Total	
		1	2	3		
current position	1	Count	14	14	28	56
		% within current position	25.0%	25.0%	50.0%	100.0%
	2	Count	0	0	28	28
		% within current position	0.0%	0.0%	100.0%	100.0%
	3	Count	14	0	70	84
		% within current position	16.7%	0.0%	83.3%	100.0%
	4	Count	0	42	210	252
		% within current position	0.0%	16.7%	83.3%	100.0%
	Total	Count	28	56	336	420
		% within current position	6.7%	13.3%	80.0%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	90.417 <sup>a</sup>	6	.000

Table 3 pertains to current position of the employees verses to current position. In the table 1 represents the regional, 2 for national, 3 for international. Majority 50 percent are operations are managed by managers and cent percent are by deputy managers internationally. Majority 83.3 percent of supervisors

are operating internationally. Majority 83.3 percent ate looking international operations which is clearly indicated by the chi-square value 90.417 at 6 degrees of freedom and p is .000 which shows the significant association between position to the operations.

**TABLE 4 current position \* gender Cross tabulation**

			Gender		Total
			1	2	
current position	1	Count	28	28	56
		% within current position	50.0%	50.0%	100.0%
	2	Count	14	14	28
		% within current position	50.0%	50.0%	100.0%
	3	Count	55	29	84
		% within current position	65.5%	34.5%	100.0%
	4	Count	224	28	252
		% within current position	88.9%	11.1%	100.0%
Total		Count	321	99	420
		% within current position	76.4%	23.6%	100.0%
<b>Chi-Square Tests</b>					
		Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square		59.879 <sup>a</sup>	3	.000	

Table 4 pertains to gender of the employees who are operating the business nearly 50 percent are male managers followed by 50 percent are male deputy managers, majority 65.5 percent are male supervisors finally majority 88.9 percent are male

other employees. The table which shows clearly indicates that there is a significant association between gender and position of the employees which is clearly indicated by chi-square value 59.879 at df 3 and significance is .000.

**TABLE 5 current position \* age Cross tabulation**

						age			Total
						1	2	4	
current position	1	Count	42	14	0	56			
		% within current position	75.0%	25.0%	0.0%	100.0%			
	2	Count	14	14	0	28			
		% within current position	50.0%	50.0%	0.0%	100.0%			
	3	Count	42	28	14	84			
		% within current position	50.0%	33.3%	16.7%	100.0%			
	4	Count	154	98	0	252			
		% within current position	61.1%	38.9%	0.0%	100.0%			
Total		Count	252	154	14	420			
		% within current position	60.0%	36.7%	3.3%	100.0%			
<b>Chi-Square Tests</b>									
		Value	df	Asymp. Sig. (2-sided)					
Pearson Chi-Square		64.049 <sup>a</sup>	6	.000					

Table 5 pertains to current position to the age of the employees 1 represents age <20 2 represents age 30-40, 4 represents age more than 56-65. In the business development process majority 75 percent are of the age group less than 29 years followed by 50 percent are of the age group less than 29 and between 30 and

40 are deputy managers, 50 percent are of the age group less than 29 years are supervisors finally majority 61.1 percent are of the age group of others. The chi-square value 64.049 at df 6 and p is .000 which clearly shows the significant association between age group to position of the employees.

**TABLE 6:current position \* qualification Cross tabulation**

		qualification			Total
		1	2	4	
current position	1 Count	28	14	14	56
	% within current position	50.0%	25.0%	25.0%	100.0%
	2 Count	0	28	0	28
	% within current position	0.0%	100.0%	0.0%	100.0%
	3 Count	56	28	0	84
	% within current position	66.7%	33.3%	0.0%	100.0%
	4 Count	126	126	0	252
	% within current position	50.0%	50.0%	0.0%	100.0%
Total	Count	210	196	14	420
	% within current position	50.0%	46.7%	3.3%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	136.167 <sup>a</sup>	6	.000

The table 6 pertains to qualification of the professionals. Majority 50 percent are of the degree holders followed by cent the deputy managers are post graduates 66.7 percent of the supervisors are degree holders finally 50 percent are having different

qualification which clearly shows the significant association between position to the qualification which is given by chi-square value 136.167 at df 6 and p is .000.

**TABLE 7:current position \* ownership Cross tabulation**

		ownership				Total
		1	2	3	4	
current position	1 Count	14	14	14	14	56
	% within current position	25.0%	25.0%	25.0%	25.0%	100.0%
	2 Count	0	0	14	14	28
	% within current position	0.0%	0.0%	50.0%	50.0%	100.0%
	3 Count	42	0	14	28	84
	% within current position	50.0%	0.0%	16.7%	33.3%	100.0%
	4 Count	112	70	0	70	252
	% within current position	44.4%	27.8%	0.0%	27.8%	100.0%
Total	Count	168	84	42	126	420
	% within current position	40.0%	20.0%	10.0%	30.0%	100.0%

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	139.676 <sup>a</sup>	9	.000

Table 7 pertains to designation versus owner ship. In the ownership 1 represents private ownership 2 represents public 3 represents joint ventured 4 foreign ownership. One fourth of managers are in private, public, joint ventured and foreign owned companies.

Fifty percent of the deputy managers are working in joint and foreign owned companies. Fifty percent of the supervisors are working in private owned companies. Nearly fifty percent of the others are working in private owned companies. It clearly

shows there is a significant association between position to ownership which is clearly indicated by the chi-square value 139.676 at degrees of freedom 9 and significance is .000

## Summary and Conclusions

The analysis in this thesis brings out the significance of social network sites in the lives of users. Collectively, it shows how networked practices mirror, support, and alter known everyday practices, especially with respect to how people present (and hide) aspects of themselves and connect with others. The fact that participation on social network sites leaves online traces offers unprecedented opportunities for researchers. To date, the bulk of SNS research has focused on impression management and friendship performance, networks and network structure, online/offline connections, and privacy issues. The scholarship in this thesis takes advantage of this affordance, resulting in work that helps explain practices online and offline, as well as those that blend the two environments.

## Future Research

The work described above and included in this special theme section contributes to an on-going dialogue about the importance of social network sites, both for practitioners and researchers. Vast, uncharted waters still remain to be explored. Methodologically, SNS researchers' ability to make causal claims is limited by a lack of experimental or longitudinal studies. Although the situation is rapidly changing, scholars still have a limited understanding of who is and who is not using these sites, why, and for what purposes, especially outside the U.S. Such questions will require large-scale quantitative and qualitative research. Richer, ethnographic research on populations more difficult to access (including non-users) would further aid scholars' ability to understand the long-term implications of these tools. We hope that the work described here and included in this collection will help build a foundation for future investigations of these and other important issues surrounding social network sites.

## Bibliography

1. Allan, D.W. Time and frequency (time-domain) estimation and prediction of precision clocks and oscillators. *IEEE Trans. on Ultrasound, Ferroelectrics, and Frequency Control UFFC-34*, 6 (November 1987), 647-654.
2. Arvind, K. Probabilistic clock synchronization in distributed systems. *IEEE Trans. Parallel and Distributed Systems* 5, 5 (May 1994), 474-487.

3. Bell Communications Research. Digital Synchronization Network Plan. Technical Advisory TA-NPL-000436, 1 November 1986.
4. Berthaud, J.-M. Time synchronization over networks using convex closures. *IEEE/ADM Trans. on Networking* 8, 2 (April 2000), 265-277.
5. Bertsekas, D., and R. Gallager. *Data Networks*. Prentice-Hall, Englewood Cliffs, NJ, 1987.
6. Calendar. *The Encyclopaedia Britannica Macropaedia*, 15th ed., vol. 15, pp. 460-477. Encyclopaedia Britannica Co., New York, NY, 1986.
7. Crocroft, J., and J.P. Onions. Network Time Protocol (NTP) Over the OSI Remote Operations Service. Network Working Group Report RFC-1165, University College London, June 1990, 10 pp.
8. Defense Advanced Research Projects Agency. Internet Protocol. Network Working Group Report RFC-791, USC Information Sciences Institute, September 1981.
9. Gusella, R., and S. Zatti. The Berkeley UNIX 4.3BSD time synchronization protocol: protocol specification. Technical Report UCB/CSD 85/250, University of California, Berkeley, June 1985.