The Awareness and Satisfaction of Clients in Terms of Data Security Management Associated with Employees Productivity in the Workplace: Hatif Libya Firm (HLC) As a Case Study

Jamal Elattresh¹& Khalid Ramadan² & Umit Tokeser³

Department of Computer Science, Institute of Materials and Engineering, Kastamonu ¹ University/Turkey

Department of Computer Science, Institute of Materials and Engineering, Kastamonu ² University/Turkey

Department of Mathematics, Faculty of Science and letters, Kastamonu University/Turkey³ alatrashly@gmail.com¹ &khdali78@gmail.com² & utokeser@kastamonu.edu.tr³

Abstract

To ensure data techy assets and development, compelling danger the board frameworks should be executed. Be that as it may, there is minimal observational proof on the elements that influence the fruitful endeavor of assurance and wellbeing aptitudes, security strategies and control, the information about data security Concerns, client fulfillment, supportability and openness, attention to dangers and documentations. It is likewise not obviously realized precisely how different elements influence the various phases of insurance and wellbeing abilities and whether all other security the board factors are similarly significant across Hatif Libya Firm (HLC). Furthermore, this study has used a descriptive research methodology as well as the required research methods that used to retrieve the related information from the electronic data base presented in figure.1. Moreover, this study aimed to answer the main research question RQ1:To what extent there is an argument between users and information security managers on the effectiveness based on information security in the organization?; and six Sub Questions:RQ₁₋₁:Is there a statistically significant difference between the users and information security managers in the information security policies and controls ?; RQ₁₋₂: Is there a statistically significant difference between the users and information security managers in the Protection and safety skills?; RQ₁₋₃: Is there a statistically significant difference between the users and information security managers in the client satisfaction?; RQ₁₋₄: Is there a statistically significant difference between the users and information security managers background about the information security concerns? RQ₁₋₅: Is there a statistically significant difference between the users and information security managers in supportability and accessibility?; RQ₁₋₆: Is there a statistically significant difference between the users and information security managers in awareness of risks and documentations?. This exploration has tried a few factors that can influence HLC in actualizing the wellbeing against data security hazard and wellbeing aptitudes and recognizes a lot of components that apply extensive effect on the hazard the board activity of the HLC. At last, the ramifications of the discoveries are talked about.

Keywords: Information security, Information security management system (ISMS), employee satisfaction, productivity and ability, risk management.

1. Introduction

Data security system is a multi-layered structure, which enables the difference in information into yields using procedures and models, while the PC structure can be portrayed as a component of an information system that has been mechanized. The information structure can be stood out from the sensory system (Tewamba et al., 2019). Furthermore, social and business data that is made and put away in electronic configuration should be ensured. This is on the grounds that deficient assurance of authoritative data may bring about devastation, mutilation, delay, exposure to unapproved people (Gearhart et al., 2019). Regardless of the noteworthy job that insurance and wellbeing abilities, security strategies and control, the information about INFOSEC Concerns, client fulfillment, supportability and openness, familiarity with dangers and documentations are play in the distinguishing proof and assurance of authoritative data, minimal experimental examinations are accounted for in the writing about the basic factors that impact the achievement of data security the executives hazard rehearses in associations (Au and Fung, 2019); (Malimage et al., 2019). Thus, it isn't plainly realized precisely how different elements influence the various phases of security and wellbeing aptitudes and whether all elements are similarly significant across Hatif Libyan Firm (HLC). Information security is methods and contraptions arranged and passed on to shield business information from modification, interference, decimation, and assessment. Convincing information Security wires security things, progressions, approaches, and furthermore techniques (Shelby and Ukkola, 2019). In addition, this paper sorted out as segment one displayed presentation and research questions, area two writing survey, segment three the examination method, section four the result and discussion; section five the conclusion.

1.1. The relationship between HLC and information security management?

The organization was asked for significant level of interchanges and information Techy Firm dependent on the reference number (4)/2008. The design was to work and keep up of the sovereign structures, and to build up the national telecom system and information security the executives system (Paliszkiewicz, 2019). It incorporates the neighborhood systems of travel The organization additionally moves to make a domain to interface with the most recent administrations and advances. Hatif Libya organization site page as introduced in the figure 1.1. below.



Figure. 1.1. Hatif Libya Firm website (source: https://hlc.ly).

1.2. Research Objectives and Questions

1.2.1. Objectives of the research

The main objective of this research study is to evaluate the impact of services and big data analysis and to evaluate the attitude and satisfaction of clients towards information security management

provides by employees performance in the work environment: Hatif Libya firm (HLC) and there are several numbers of sub-goals that are has been extracted from the main objective.

- To learn the reality the satisfaction level of clients towards information security management provides by employees performance in the work environment: Hatif Libya firm (HLC) on Libyan employees and users.
- The extent of the high quality provided of the interface outcome to all the users and their performance at their work effectively and efficiently related to high quality of the required outcome.
- To focus on presenting contemporary high level of performance concepts, which
 constitute a crucial stage in the conceptual framework according to the scientific
 development.
- To present proposals in light of the outcomes of the satisfaction of clients towards information security management provides by employees performance in the work environment: Hatif Libya firm (HLC) in order to enhance the process of users satisfaction as well as the exchange of users performance and productivity and within the HLC providers.
- To understand the conceptual framework of HLC as well as behaviors of some employees.
- To identify the awareness degree of the employees for their own role to gain the advantages of using HLC services.
- To investigate besides enhance the employees qualification skills.
- To recognize the compliance of the employees with the usage of HLC.

1. To what extent there is an argument between users and information security managers on the effectiveness based on information security in the organization? Sub Ouestions:

- **1.1.**Is there a statistically significant difference between the users and information security managers in the information security policies and controls?
- **1.2.** Is there a statistically significant difference between the users and information security managers in the Protection and safety skills?
- **1.3.**Is there a statistically significant difference between the users and information security managers in the client satisfaction?
- **1.4.**Is there a statistically significant difference between the users and information security managers background about the information security concerns?
- **1.5.**Is there a statistically significant difference between the users and information security managers in supportability and accessibility?
- **1.6.**Is there a statistically significant difference between the users and information security managers in awareness of risks and documentations?

2. Literature Review

As demonstrated by Benjelloun and Lahcen, (2019), trade of information development is a certainly basic section for techno-financial improvement in making countries. Nonetheless, as indicated by White et al., (2019), there have been no examinations in IT move in the development countries, for instance, Arab countries. Furthermore, the accomplishment of the IT trade process depends on different issues that must be perceived for each country. Trabelsi and Barka, (2019) announced that information is a champion among the most basic parts of business organization at the Libyan association. Chan and Janjarasjit, (2019); Helms, (2019); Thus, Au and Fung, (2019) has stated that with the grow of criticalness of information advancement, there is a sincere prerequisite for palatable extents of information security the executives. Tagarev and Polimirova, (2019); Na et al., (2019); Tarafdar and Bose, (2019) has articulated that an data security rehearses as there are only a few investigations dealing with the evaluation of information security and organization quality in the setting aside cash of Libya. The revelations relied upon three differing free factors advantage quality, customer devotion and security which showed that all of these components affected purchasers satisfaction in the Libyan dealing with a record fragment just as data security the board structures. In addition, Libyan E-government should upgrade all destinations of the assembly and teach government laborers to build efficiency and worker execution (Choi and Yoon, 2019); (Nasir et al., 2019); (Sommestad et al., 2019).

In 2013, protestors raged the home office of the Libya Telecom and Techy and data security the board mentioning and convincing specialists to cut off web access across immense pieces of the country to impede getting to the online organizations, as online risks and horrible ambushes on columnists expanded. Benghazi was cut off from all telecom systems for some time in 2015. Saw Gross residential item (GDP) fall definitely starting late and looks set to continue into (2017), has blocked the limit of Telco's to place assets into the establishment. Web penetration has usually been low in Libya. According to figures from the International Telecommunication Union, web penetration improved by means of one rate point from 2015 to 2016, from twenty to twenty-five percent of Libyans. Furthermore, this rising may be related with better 3G incorporation, increase information security organization, and lower costs. Shao et al., (2019); Dempsey et al., (2020); Hustad et al., (2019) has expressed that there is an association among various leveled culture improvements and the gathering of information security organization in Libya .Also, Libya needs to develop a close by association with precisely and propelled countries, for instance, the US and the UK, to gain the pined for ground and significant level of data the board framework utilization (Zellhofer, 2019); (Al Harthi, 2019); (Zhou et al., 2019). Moreover, in 2012, the Libyan government made concurrences with the UK to help in the improvement of the really essential social correspondence and web transmission and media transmission and guaranteeing protection and security issue foundations (Wu et al., 2019); (Hwang et al., 2019); (Mishra et al., 2019). Hatif Libya organization (HLC) should be adjusted this nerd and execute it over the whole association with the ultimate objective to improve the correspondence among the governing body and the inhabitants or people to people, individuals to a relationship inside or outside Libya. In addition, the usage of information security organization licenses Hatif Libya association to discover what the laborers or customers need and how to satisfy their necessities; moreover, it guarantees media transmission and insurance in the midst of clients of Hatif Libya. Bhattacharjya et al., (2019); Mishra and Thakur, (2019); Khattak et al., (2019) have examined that control structure

deregulation speeds up increasingly broad reliance information systems and media transmission framework to share the fundamental and non-essential data. Bhattacharjya et al., (2019) has expressed that information and correspondence advancements, and furthermore information security are comprehensively used by means of associations to improve firms forcefulness.

METHODOLOGY

A descriptive research method was utilized which is reasonable for this kind of research study (Asadollahi Kheirabadi and Mirzaei, 2019). The investigation will use a blended strategy to examine configuration by methods for quantitative and qualitative subjective methodologies. In this way, inquire about techniques, polls were utilized to gather the necessary information which can satisfactorily address the examination research questions. Research participants completed an online questionnaire (Survey Monkey source https://www.surveymonkey.com/). The questionnaire data was analyzed quantitatively via means of SPSS software (Riff et al., 2019).

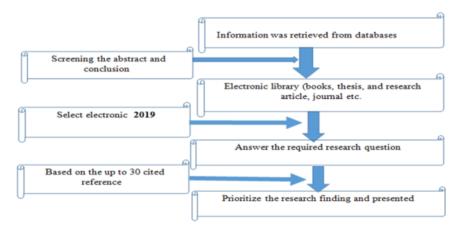


Figure.1. The required research methods that used in the Literature review and the related information.

3.2 The Target sample

The participants of this research were the employees of the Hatif Libya firm (HLC). The total number of the target sample was 201. As presented in Figure.1.2.below the model of analysis. This study had taken as a sample of the gathered data to perform the reliability test which is a suitable way to this kind of data analysis.

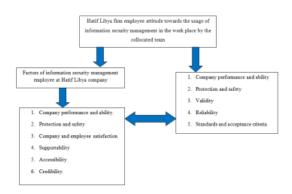


Figure.2.1. The model of analysis.

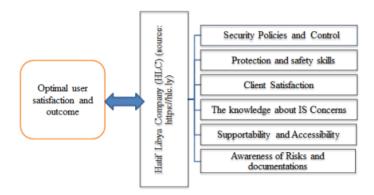


Figure.2.2. The second model of the research analysis.

3. Result and Discussion

4.1 Statistical Analysis

The statistical analyses performed were; correlational analysis, which were utilized via means of SPSS software.

Table.4.3. The target sample distribution and education level.

Educat	ion level				
				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	High school	34	24.8	24.8	24.8
	Bachelor	67	48.9	48.9	73.7
	Master's degree	23	16.8	16.8	90.5
	Doctoral	8	5.8	5.8	96.4
	degree				
	Other	5	3.6	3.6	100.0
	Total	137	100.0	100.0	

As introduced in Table.4.3. the appropriation of members as indicated by Education level. The target sample were 137 altogether. What's more, 24.8percent of members had High School, 48.9percent had four year college education, 16.8percent had graduate degree, 5.8percent had PhD and 3.6percent had different capabilities.

Table.4.4. Participants distribution according to years of experience.

Years	of Experience				
				Valid	
		Frequency	Percent	Percent	Cumulative Percent
Valid	Less than 5 years	32	23.4	23.4	23.4
	From 5 to less than 10	30	21.9	21.9	45.3
	years				
	From 10 to less than 15	24	17.5	17.5	62.8
	years				
	15 years and above	51	37.2	37.2	100.0
	Total	137	100.0	100.0	

Table.4.4. has demonstrated the conveyance of members as indicated by long stretches of understanding. Which is exhibited as 23.4percent of members had under 5 years of experience, 21.9 percent had from 5 to under 10 years, 17.5 percent had from 10 to under 15 years and 37.2percent had 15 years or more.

Table.4.5. The participants distribution according to their use of Information Security Management.

How o	How often do you use Information Security Management						
				Valid			
		Frequency	Percent	Percent	Cumulative Percent		
Valid	Always	37	27.0	27.0	27.0		
	Often	47	34.3	34.3	61.3		
	Sometimes	34	24.8	24.8	86.1		
	Rarely	13	9.5	9.5	95.6		
	Never	6	4.4	4.4	100.0		
	Total	137	100.0	100.0			

Table. 4.5. shows the conveyance of members as indicated by their utilization of Information Security Management. 27.0 percent consistently use it, 34.3percent frequently use it, 24.8percent here as well as there use it, 9.5percent once in a while utilize it as well as 4.4percent never use it.

Table.4.6. The participants distribution according to their Workplace

Workp	place				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	The firm management	38	27.7	27.7	27.7
	Administrations	20	14.6	14.6	42.3
	Communications area	40	29.2	29.2	71.5
	Department	27	19.7	19.7	91.2
	Services Office	12	8.8	8.8	100.0
	Total	137	100.0	100.0	

As presented in Table.4.6. the distribution of participants according to workplace. 27.7 work in firm management, 14.6percent work in administrations, 29.2percent work in communications area, 19.7 work in department and 8.8percent work in services office.

Table.4.6. The participants distribution according to their position

Positio	n				
				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Information security managers	58	42.3	42.3	42.3
	End-utilizers	79	57.7	57.7	100.0
	Total	137	100.0	100.0	

According to Table.4.6. the distribution of participants according to position. 42.3percent work as Information Security Managers and 57.7percent are End-utilizers.

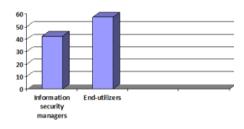


Figure.4.6. The target sample distribution according to their position.

4.2 Descriptive statistics of study variables

Table.1.1. The descriptive statistics of Security Policies and Control and its items

escriptive Statistics	

	N	Mean	Std. Deviation
F1: Security Policies and Control	133	3.75	.74015
17 Use encryption mechanisms to protect INFO as well as INFO	137	3.80	1.058
22 Information security policy as well as method is periodically reviewed as well as improved:	137	3.56	1.090
23 Training staff on information systems periodically to develop their skills as well as raise the level of performance in security developments:	137	3.56	1.254
25 The employment terms of the firm are to sign a contract not to disclose any sensitive information concerning the firm:	137	3.85	.999
26 Employees are required to report any weaknesses they may see in the firm's INFO frameworks:	137	3.99	.951

27 There is a regulatory record to track user activities and information security incidents within the firm:	137	3.82	.941
30 An agency responsible for the management of the firm supervises information security policies within the firm:	137	3.75	.945
42 There are plans to restore the business to normal following a specific time frame and in case of any failures or interruptions in the information security management within the firm and its subsidiaries:	133	3.65	.993
Valid N (listwise)	133		

Table.1.2. The descriptive statistics of Protection and safety skills and its items.

Descriptive Statistics			
	N	Mean	Std. Deviation
F2: Protection and safety skills	133	3.72	.86733
29 The Firm has written policies and procedures to manage the security of the information and its operating systems:	137	3.63	1.098
31 The senior management of the firm is fully aware of the importance of the information systems security management policy with the presence of preventive measures in the implementation of any changes to information systems to protect them from risk:	137	3.90	.877
40 There is a directory for the classification of information that can help the employee to renew how information is handled and protected	133	3.62	1.140
Valid N (listwise)	133		

Table.1.2. presents the illustrative insights of the factor 2 which exhibited in F2: Protection and wellbeing abilities and its things. The most noteworthy thing is thing 31. this shows the senior administration of the organization is completely mindful of the significance of the data frameworks security the executives approach with the nearness of preventive measures in the usage of any progressions to data frameworks to shield them from chance (M = 3.90, SD = .877). The most minimal thing is 40, which shows that there is seldom a catalog for the characterization of data that can assist the representative with renewing how data is dealt with and secured (M = 3.62, SD = 1.140).

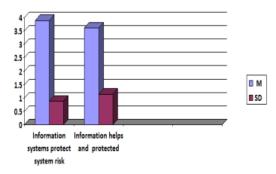


Figure.1.4. the descriptive statistics of Protection and safety skills and its items.

Table.1.3. The descriptive statistics of client satisfaction.

Descriptive Statistics			
	N	Mean	Std. Deviation
F3: Client satisfaction	137	2.52	.74722
7 The extent of the firm's use of electronic information systems in performing its functions and providing its services:	137	2.80	.956
8 The presence of a competent department to manage the security of the firm's information systems:	137	2.62	1.023
9 The level of training in the field of information security management compared to the systems operating in the firm:	137	2.20	.971
10 The percentage allocated to spend on management procedures and the protection of information and operating systems compared to the general expenses of the firm:	137	2.47	1.000
Valid N (listwise)	137		

Table.1.4. The descriptive statistics of the knowledge about IS Concerns.

Descriptive Statistics			
	N	Mean	Std. Deviation
F4: The knowledge about IS Concerns	133	4.00	.68595
32 The powers of access to information systems are given according to the administrative and functional position assigned to the concerned employee:	135	4.15	.851
33 There are no general accounts and powers used by several employees, each employee has his specific account accessibility:	135	3.91	.934
41 The events that lead to the discontinuation of the information systems in the firm are identified as well as documented, as well as the assessment as well as risks resulting from those events are to establish contingency plans to ensure the restoration of work:	133	3.95	.928

Valid N (listwise)	133	

Table.1.4. shows elucidating measurements of F4 the information about IS Concerns as well as its things. The most noteworthy thing is thing 32. This confirms the forces of access to data frameworks are offered by the authoritative as well as useful position doled out to the concerned worker (M = 4.15, SD = .851). The least thing is thing 33, which shows that there are no broad records which is linked with powers utilized by a few workers, every representative has his particular record availability (M = 3.91, SD = .934).

Table.1.5. The descriptive statistics of Supportability and Accessibility

Descriptive Statistics			
	N	Mean	Std. Deviation
F5: Supportability and Accessibility	135	3.74	.74532
35 Most sensitive information systems within the firm's departments as well as branches are isolated via a local private network (LAN):	135	3.96	.999
36 Access to the Internet sometimes obscures the Internet through the firm's information systems:	135	3.69	1.054
37 There are guidelines for how to create strong passwords for information systems:	135	3.61	1.139
38 In the firm information systems operating the user's powers are closed after a specified period of lack of activity:	135	3.53	1.125
39 Performance records are used to store user activities as well as information for reasons of security as well as confidentiality of information	135	3.90	.900
Valid N (listwise)	135		

Table.1.5.above has displayed a descriptive insights of F5: Supportability as well as Accessibility as well as its things. The most noteworthy thing is thing 35, where delicate data frameworks inside the organization's areas of expertise as well as branches are separated by means of a nearby private system (LAN) (M = 3.96, SD = .999). The most reduced thing is thing 38: this specific outcome designates that in the organization data frameworks working the client's forces are shut after a predefined time of absence of movement (M = 3.53, SD = 1.125).

Table.1.6. The descriptive statistics of Awareness of Risks and documentations

Descriptive Statistics			
	N	Mean	Std. Deviation
F6: Awareness of Risks and documentations	137	3.92	.75612
11 The use of security requirements, for instance, walls - doors - locks – cards to protect the components of the firm's:	137	3.94	.961
12 Power as well as communication cables that transmit data or support servers Information systems are protected against tampering or destruction:	137	3.86	1.001
13 The presence of an alternative electric power source in the firm:	137	4.03	.977
14 Maintain the equipment of the firm properly to ensure its continuity as well as safety:	137	3.89	1.089
15 Any employee who is not qualified eliminated from making any material or moral changes to the devices operating within the firm's information frameworks	137	4.08	.993
18 Provide the backup service	137	3.90	1.087
19 The databases utilized in the firm framework provide multiple security levels:	137	3.87	1.006
20 Using protection programs to track penetration as well as infiltration:	137	3.76	1.081
Valid N (listwise)	137		

Table 1.6. has displayed a descriptive insights of F6: Awareness of Risks as well as documentations as well as its things. In augmentations, the table portrays that the most elevated thing is thing 15, as any representative who isn't qualified killed from making any material or good changes to the gadgets working inside the organization's data frameworks (M = 4.08, SD = .993). The most reduced thing is thing 20: Using insurance projects to follow entrance and invasion (M = 3.76, SD = 1.081).

4.3 Correlations between variables

Pearson Correlation was determined between elements of data security the executives (Security Policies as well as Control, Protection, as well as wellbeing aptitudes, Client Satisfaction, The information about IS Concerns, Supportability as well as Accessibility, Awareness of Risks

and documentations) and data security the board suppliers' discernments and demeanors towards the utilization of data security the board at working environment. Results are displayed beneath. As appeared in Table 4.15 underneath, positive noteworthy connections were found between security strategies as well as control and Client Satisfaction as well as Awareness of Risks and documentations (.366 and .698 individually), p < .01. Insurance as well as wellbeing aptitudes associate fundamentally and emphatically with Client Satisfaction, The information about IS Concerns, Supportability and Accessibility as well as Awareness of Risks as well as documentations (.391, .420, .545 as well as.334 separately), p < .01. Customer Satisfaction, in increases, related in a similar way (.253, .316 and .318 separately). Besides, the information about IS Concerns and Supportability as well as Accessibility had huge and solid positive relationships with Awareness of Risks as well as documentations (.698 as well as .538 individually), p < .01. In options, the help can be added to the proposed demonstrate as well as energize trial of indicators of Client Satisfaction investigation. In Table 4.15, the Correlations test and factors Pearson Correlation was determined between elements of data security the board (Security Policies as well as Control, Protection and wellbeing aptitudes, Client Satisfaction, The information about IS Concerns, Supportability as well as Accessibility, Awareness of Risks as well as documentations) and data security the executives suppliers' discernments and frames of mind towards the utilization of data security the executives at work environment. Results are exhibited as underneath.

As appeared in Table 4.15 positive noteworthy connections were found between Security Policies and Control and Client Satisfaction as well as Awareness of Risks and documentations (.366 as well as .698 individually), p < .01. Insurance and security aptitudes correspond essentially as well as emphatically with Client Satisfaction, The information about IS Concerns, Supportability as well as Accessibility as well as Awareness of Risks as well as documentations (.391, .420, .545 as well as .334 individually), p < .01. Customer Satisfaction, in increments, associated in a similar way (.253, .316 as well as .318 separately). The information about IS Concerns and Supportability and Accessibility had critical and solid positive relationships with Awareness of Risks and documentations (.698 as well as .538 separately), p < .01. In options, the help can be added to the proposed display as well as support trial of indicators of Client Satisfaction examination.

Table.4.15. The Correlations test and the research main factors

The Correlations										
		F1	F2	F3	F4	F5	F6			
F1- Security Policies as well as Control	Pearson Correlation	1								
	Sig. (2-tailed)									
	N	133								
F2- Protection as well as safety skills	Pearson Correlation	.647**	1							

	Sig. (2-tailed)	.000					
	N	133	133				
F3- Client	Pearson	.366**	.391**	1			
Satisfaction	Correlation						
	Sig. (2-tailed)	.000	.000				
	N	133	133	137			
F4- The knowledge about IS Concerns	Pearson Correlation	.535**	.420**	.253**	1		
	Sig. (2-tailed)	.000	.000	.003			
	N	133	133	133	133		
F5- Supportability as well as Accessibility	Pearson Correlation	.631**	.545**	.316**	.527**	1	
Accessionity	Sig. (2-tailed)	.000	.000	.000	.000		
	N	133	133	135	133	135	
F6- Awareness of Risks as well as documentations	Pearson Correlation	.698**	.334**	.318**	.457**	.538**	1
documentations	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	133	133	137	133	135	137
**. Correlation is sig	nificant at the 0.01	level (2-	tailed).				1

Analysis of Group variances using Independent Samples T- test

The target sample Likert reactions of Group Statistics, for example, one to seven were arrived at the midpoint of for all the theory factor things for each factor build. Factor implies, standard deviations as well as Std. Mistake Mean are shown in Table 4.13 Means fell between 2, normal, and 4, concur, for all elements aside from data security the board suppliers customer fulfillment (mean for Information security supervisors, End-utilizers = 2.6034, 2.4620 individually). The things in that specific develop explicitly got some information about protection as well as security worries about data security the board standard utilization as well as the capacity to settle on your own choices without being constrained by any other individual being adversely affected by data security the executives standard use, subsequently, it seemed well as well as good that this build

mean would be lower than the others. Scale implies for different variables were as per the following: Information Security Service Management implies esteem (Information security managers=3.7204; End-utilizers= 3.6014); Security Policies as well as Control implies esteem (Information security managers=3.8333; End-utilizers= 3.6908); Protection as well as wellbeing abilities implies esteem (Information security managers= 3.9883; End-utilizers= 3.6908); The information about IS Concerns implies esteem (Information security managers= 3.9883; End-utilizers= 3.6908); Supportability which is associated with Accessibility implies esteem (Information security managers= 3.8241; End-utilizers= 3.6727); Awareness of Risks as well as documentations implies esteem (Information security managers= 3.8836; End-utilizers= 3.9399). Table. 4.13. shows the methods as well as standard deviations for singular survey things.

Table.4.13. The Group variances using Independent of the t-test variables

Group Statistics					
	Position	N	Mean	Std. Deviation	Std. Error Mean
Information Security Service Management	Information security managers	57	3.7204	.62107	.08226
	End- utilizers	76	3.6014	.55571	.06374
Security Policies as well as Control	Information security managers	57	3.8333	.82149	.10881
	End- utilizers	76	3.6908	.67190	.07707
Protection as well as safety skills	Information security managers	57	3.9883	.86595	.11470
	End- utilizers	76	3.5175	.81721	.09374
Client Satisfaction	Information security managers	58	2.6034	.84037	.11035

	End- utilizers	79	2.4620	.66997	.07538
The knowledge about IS Concerns	Information security managers	57	4.0175	.68551	.09080
	End- utilizers	76	3.9912	.69062	.07922
Supportability as well as Accessibility	Information security managers	58	3.8241	.70892	.09309
	End- utilizers	77	3.6727	.76976	.08772
Awareness of Risks as well as documentations	Information security managers	58	3.8836	.83570	.10973
	End- utilizers	79	3.9399	.69651	.07836

Table.4.14. The Independent Samples Test

Independent Sar	mples Test									
	P									
		Levene Test for Equalit Variance	r y of	t-test fo	t-test for Equality of Means					
		F	Sig.	Т	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95percent Confident Interval of Difference	ce f the
									Lower	Upper
Information Security Service Management	Equal variances assumed	2.259	.135	1.162	131	.247	.11899	.10242	.08363-	.32161
- Trianagement	Equal variances			1.143	113.015	.255	.11899	.10407	- .08719-	.32517

										,
	not assumed									
Security Policies as well as Control	Equal variances assumed	5.290	.023	1.100	131	.273	.14254	.12958	.11381-	.39889
	Equal variances not assumed			1.069	106.308	.287	.14254	.13334	.12181-	.40689
Protection as well as safety skills	Equal variances assumed	.265	.608	3.205	131	.002	.47076	.14690	.18015	.76137
	Equal variances not assumed			3.178	116.865	.002	.47076	.14813	.17739	.76413
Client Satisfaction	Equal variances assumed	2.414	.123	1.095	135	.275	.14142	.12911	.11392-	.39676
	Equal variances not assumed			1.058	105.776	.292	.14142	.13363	.12352-	.40637
The knowledge about IS Concerns	Equal variances assumed	.271	.604	.218	131	.828	.02632	.12063	.21232-	.26495
	Equal variances not assumed			.218	121.248	.827	.02632	.12050	.21224-	.26487
Supportability as well as Accessibility	Equal variances assumed	.658	.419	1.170	133	.244	.15141	.12941	.10455-	.40737
	Equal variances			1.184	127.675	.239	.15141	.12791	- .10168-	.40450

	not assumed									
Awareness of Risks as well as documentations	Equal variances assumed	5.329	.022	.429-	135	.669	05625-	.13114	.31560-	.20310
	Equal variances not assumed			.417-	109.207	.677	05625-	.13484	.32350-	.21099

Correlations between variables

Pearson Correlation was determined between variables of data security the board (Security Policies as well as Control, Protection as well as wellbeing abilities, Client Satisfaction, The information about IS Concerns various elements, for example, Supportability as well as Accessibility, Awareness of Risks as well as documentations) as well as data security the executives suppliers' recognitions as well as frames of mind towards the utilization of data security the board at working environment. Results are displayed as beneath. As appeared in Table 4.15. a positive huge connections were found between Security Policies as well as Control as well as Client Satisfaction as well as Awareness of Risks as well as documentations (.366 as well as .698 individually), p < .01. Insurance as well as security abilities relate essentially as well as emphatically with Client Satisfaction, The information about IS Concerns, Supportability and Accessibility as well as Awareness of Risks as well as documentations (.391, .420, .545 as well as .334 separately), p < .01. Customer Satisfaction, in augmentations, associated in a similar way (.253, .316 as well as .318 separately). Furthermore, the information about IS Concerns as well as Supportability as well as Accessibility had huge and solid positive relationships with Awareness of Risks as well as documentations (.698 as well as .538 separately), p < .01. In options, the help can be added to the proposed show and empower trial of indicators of Client Satisfaction examination.

Table.4.15. The Correlations test as well as factors

Correlations										
		F1	F2	F3	F4	F5	F6			
F1- Security Policies as well as Control	Pearson Correlation	1								
Control	Sig. (2-tailed)									
	N	133								

	T	**	T 4	I			1
F2- Protection as well as safety skills	Pearson Correlation	.647**	1				
	Sig. (2-tailed)	.000					
	N	133	133				
F3- Client Satisfaction	Pearson Correlation	.366**	.391**	1			
	Sig. (2-tailed)	.000	.000				
	N	133	133	137			
F4- The knowledge about IS Concerns	Pearson Correlation	.535**	.420**	.253**	1		
	Sig. (2-tailed)	.000	.000	.003			
	N	133	133	133	133		
F5- Supportability as well as Accessibility	Pearson Correlation	.631**	.545**	.316**	.527**	1	
recessionity	Sig. (2-tailed)	.000	.000	.000	.000		
	N	133	133	135	133	135	
F6- Awareness of Risks as well as documentations	Pearson Correlation	.698**	.334**	.318**	.457**	.538**	1
documentations	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	133	133	137	133	135	137
**. Correlation is sign	nificant at the 0.	01 level (2-tailed).			•	

As per Table.4.15. comparative with the table, there are some significant relationships between data security the executives variables ought to be referenced:

• Positive noteworthy connection was found between Security Policies as well as Control and Protection as well as wellbeing aptitudes.

- Client Satisfaction had positive critical connections with Security Policies as well as Control and Protection as well as wellbeing aptitudes.
- There is a high positive critical connections amongst supportability as well as availability and attention to Risks as well as documentations.
- Supportability as well as Accessibility had positive huge connections with The information about IS Concerns.

Analysts of Client Satisfaction

Table.4.16. The Predictors of Client Satisfaction

	Cori	elations					
		F1	F2	F3	F4	F5	F6
F1- Security Policies as well as Control	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	133					
F2- Protection as well as safety skills	Pearson Correlation	.647**	1				
	Sig. (2-tailed)	.000					
	N	133	133				
F3- Client Satisfaction	Pearson Correlation	.366**	.391**	1			
	Sig. (2-tailed)	.000	.000				
	N	133	133	137			
F4- The knowledge about IS Concerns	Pearson Correlation	.535**	.420**	.253**	1		
	Sig. (2-tailed)	.000	.000	.003			

	N	133	133	133	133		
F5- Supportability as well as Accessibility	Pearson Correlation	.631**	.545**	.316**	.527**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	133	133	135	133	135	
F6- Awareness of Risks as well as documentations	Pearson Correlation	.698**	.334**	.318**	.457**	.538**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	133	133	137	133	135	137

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Factor three shows that change clarified by the factor which is Predictors Correlations in F1 as well as F2 (.366, .391 separately), p < .001. Moreover, Security Policies as well as Control, Protection as well as wellbeing abilities and Client Satisfaction are critical indicators of the information about IS Concerns towards the use of data security the executives gauges at work environment Pearson Correlation esteems (F1= .535, F2=.420 as well as F3= .253 individually, p < .01). This demonstrates an incomplete intervention of the utilization of data security the executives principles of among supportability as well as openness as well as familiarity with Risks as well as documentations towards the use of data security the board measures at work environment. Factor five shows that Predictors of supportability as well as availability on Client Satisfaction fluctuation clarified by the factor five which is Pearson Correlation are for F1,2,3,4 values are (.631, .545, .316 respectively, p < .01).

5.Discussion

The fundamental goal of this examination is to recognize the impacts of the exploration factors on data security the board at HLC. The greater part of the respondents were guys as well as their age extending somewhere in the range of 40 as well as 49 years, and the dominant part has Bachelor (Wu et al., 2019); (Hwang et al., 2019); (Mishra et al., 2019). Table.4.4, shows the dispersion of members as per long periods of experience; 23.4percent of members have under 5 years of experience, 21.9percent have from 5 to under 10 years, 17.5percent have from 10 to under 15 years and 37.2percent have 15 years or more. In the wake of breaking down the information as well as testing the theories, the investigation uncovered that table.1.1 has spoken to the engaging insights of F1: Security Policies as well as Control and its things. The most elevated thing is thing 26; Employees are required to report any shortcomings they may find in the organization's data frameworks the board (M = 3.99, SD = .951). The least things are 22; Information security strategy

as well as technique are occasionally surveyed and improved (M = 3.56, SD = 1.090) and 23; Training staff on data frameworks intermittently to build up their aptitudes as well as raise the degree of execution in security advancements which is similar to Bhattacharjya et al., (2019); (Mishra and Thakur, 2019) (M = 3.56, SD = 1.254). Table.1.3. above shows elucidating insights of F3: Client fulfillment as well as its things (Wu et al., 2019); (Hwang et al., 2019); (Mishra et al., 2019). The most noteworthy thing is thing 7; the degree of the organization's utilization of electronic data frameworks in playing out its capacities as well as giving its administrations (M = 2.80, SD = .956). The most minimal thing is thing 9; the degree of preparing in the field of data security the executives contrasted with the frameworks working in the organization (M = 2.20, SD = .971).

3. Conclusion

This exploration study planned to recognize components might interfere with data security the board at H LC. After information investigation as well as speculations testing, the outcomes show that all the examination factors impact data security the executives at HLC. Furthermore, what's more, the discoveries reaffirm that all the theory factors have a positive huge relationships were found between Security Policies as well as Control and Client Satisfaction as well as Awareness of Risks and documentations which is mirrors a positive administrations execution that gave by HLC organization. Security and wellbeing aptitudes correspond essentially as well as emphatically with Client Satisfaction, The information about IS Concerns, Supportability as well as Accessibility which is linked with Awareness of Risks as well as documentations. Customer Satisfaction, in augmentations, connected in a similar way. At long last, this examination may propose directing further research to consider more factors which may influence the data security the executives, for example, trust, as well as ease of use of HLC to increase the services quality.

REFERENCES

- Al Harthi, A. N. (2019). Effective communication of information security risk (Doctoral dissertation, Cardiff University).
- Asadollahi Kheirabadi, M., & Mirzaei, Z. (2019). Descriptive valuation pattern in education and training system: a mixed study. Journal of Humanities Insights, 3(01), 7-12.
- Au, C. H., & Fung, W. S. (2019). Integrating knowledge management into information security: From audit to practice. International Journal of Knowledge Management (IJKM), 15(1), 37-52.
- Au, C. H., & Fung, W. S. (2019). Integrating knowledge management into information security: From audit to practice. International Journal of Knowledge Management (IJKM), 15(1), 37-52.
- Benjelloun, F. Z., & Lahcen, A. A. (2019). Big data security: Challenges, recommendations and solutions. In Web Services: Concepts, Methodologies, Tools, and Applications (pp. 25-38). IGI Global.
- Bhattacharjya, A., Zhong, X., Wang, J., & Li, X. (2019). Security challenges and concerns of Internet of Things (IoT). In Cyber-Physical Systems: Architecture, Security and Application (pp. 153-185). Springer, Cham.
- Chan, S. H., & Janjarasjit, S. (2019). Insight into hackers' reaction toward information security breach. International Journal of Information Management, 49, 388-396.

- Choi, D. K., & Yoon, H. S. (2019). A Study on Impact of Information Security Management on Sales Performance and the Value of Corporate: Focusing on Information Security Management System (ISMS). 디지털콘텐츠학회논문지 (J. DCS), 20(8), 1567-1576.
- Dempsey, K., Pillitteri, V., Baer, C., Niemeyer, R., Rudman, R., & Urban, S. (2020). Assessing Information Security Continuous Monitoring (ISCM) Programs: Developing an ISCM Program Assessment (No. NIST Special Publication (SP) 800-137A (Draft)). National Institute of Standards and Technology.
- Gearhart, C. M., Meyer, C., Overby Jr, L. H., & Wierbowski, D. J. (2019). U.S. Patent No. 10,348,681. Washington, DC: U.S. Patent and Trademark Office.
- Helms, J. (2019). Information Systems Security Policy Management: A Literature Review.
- Hustad, E., Bekkevik, F. M., Holm, O. R., & Vassilakopoulou, P. (2019). Challenges and Measures for Information Security Practices: A Literature Review on Systemic and Idiosyncratic Aspects.
- Hwang, S. O., Kim, Y. H., Park, K. M., & Rhyu, S. R. (2019). U.S. Patent No. 10,498,473. Washington, DC: U.S. Patent and Trademark Office.
- Khattak, H. A., Shah, M. A., Khan, S., Ali, I., & Imran, M. (2019). Perception layer security in Internet of Things. Future Generation Computer Systems, 100, 144-164.
- Malimage, K., Raddatz, N., Trinkle, B. S., Crossler, R. E., & Baaske, R. (2019). Impact of Deterrence and Inertia on Information Security Policy Changes. Journal of Information Systems.
- Mishra, S., & Thakur, A. (2019). A Survey on Mobile Security Issues. Available at SSRN 3372207.
- Mishra, S., Sahoo, S., & Mishra, B. K. (2019). Addressing Security Issues and Standards in Internet of Things. In Emerging Trends and Applications in Cognitive Computing (pp. 224-257). IGI Global.
- Na, O., Park, L. W., Yu, H., Kim, Y., & Chang, H. (2019). The rating model of corporate information for economic security activities. Security Journal, 1-22.
- Nasir, A., Abdullah Arshah, R., & Ab Hamid, M. R. (2019). A dimension-based information security culture model and its relationship with employees' security behavior: A case study in Malaysian higher educational institutions. Information Security Journal: A Global Perspective, 28(3), 55-80.
- Paliszkiewicz, J. (2019). Information Security Policy Compliance: Leadership and Trust. Journal of Computer Information Systems, 59(3), 211-217.
- Pennekamp, J., Henze, M., Schmidt, S., Niemietz, P., Fey, M., Trauth, D., ... & Wehrle, K. (2019, November). Dataflow Challenges in an Internet of Production: A Security & Privacy Perspective. In Proceedings of the ACM Workshop on Cyber-Physical Systems Security & Privacy (pp. 27-38).
- Riff, D., Lacy, S., Fico, F., & Watson, B. (2019). Analyzing media messages: Using quantitative content analysis in research. Routledge.
- Shao, X., Siponen, M., & Pahnila, S. (2019). To Calculate or To Follow Others: How Do Information Security Managers Make Investment Decisions?. In Proceedings of the Annual Hawaii International Conference on System Sciences. University of Hawai'i at Manoa.
- Shelby, Z., & Ukkola, S. (2019). U.S. Patent Application No. 10/313,423.

- Sommestad, T., Karlzén, H., & Hallberg, J. (2019). The theory of planned behavior and information security policy compliance. Journal of Computer Information Systems, 59(4), 344-353.
- Tagarev, T., & Polimirova, D. (2019, June). Main Considerations in Elaborating Organizational Information Security Policies. In Proceedings of the 20th International Conference on Computer Systems and Technologies (pp. 68-73).
- Tarafdar, P., & Bose, I. (2019). Systems theoretic process analysis of information security: the case of aadhaar. Journal of Organizational Computing and Electronic Commerce, 29(3), 209-222.
- Tewamba, H. N., Kamdjoug, J. R. K., Bitjoka, G. B., Wamba, S. F., & Bahanag, N. N. M. (2019). Effects of Information Security Management Systems on Firm Performance. American Journal of Operations Management and Information Systems, 4(3), 99-108.
- Trabelsi, Z., & Barka, E. (2019, April). A Basic Course Model on Information Security for High School IT Curriculum. In 2019 IEEE Global Engineering Education Conference (EDUCON) (pp. 63-70). IEEE.
- White, G. L., Hewitt, B., & Kruck, S. E. (2019). Incorporating global information security and assurance in IS education. Journal of Information Systems Education, 24(1), 1.
- Wu, D., Deng, L., Wang, H., Liu, K., & Wang, R. (2019). Similarity aware safety multimedia data transmission mechanism for Internet of vehicles. Future Generation Computer Systems, 99, 609-623.
- Zellhofer, D. (2019). Information Security Policies in Organizations. In Organizing for the Digital World (pp. 49-62). Springer, Cham.
- Zhou, Y., Shen, Q., Dong, M., Ota, K., & Wu, J. (2019, April). Chaos-Based Delay-Constrained Green Security Communications for Fog-Enabled Information-Centric Multimedia Network. In 2019 IEEE 89th Vehicular Technology Conference (VTC2019-Spring) (pp. 1-6). IEEE.