

A MODEL ON INFORMATION SECURITY THROUGH KNOWLEDGE SHARING ATTITUDE: EVIDENCE FROM PAKISTANI BANKING INDUSTRIES' BEHAVIORS

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ABSTRACT: *The aim of the current research is to target the role of facilitating condition (Organization Support and trust factor) towards the issue of securing information through knowledge sharing behavior. The data was gathered through convenient sampling by using adopted questionnaire of Safa and Vons (2016) from the staff of Pakistani banking industry, who mainly involves in the activities of online transaction. Data was analyzed by using PLS (SEM) technique. The present study findings revealed the role of organization support and organization trust toward motivating the employee's attitudinal factor that ultimately affect knowledge sharing behavior. Sharing of knowledge plays an enormous part in the field of securing data, because of its high impact on laborers' data safety awareness. The outcomes of the data analysis presented that external motivational and internal motivational factors have constructive effects on workers' attitude toward securing information via sharing behavior. Then again, the observed behavioral control, and subjective-standards do have positive fascination with data security learning and sharing goal that eventually influences data security information sharing conduct. This review surveyed the entire procedure of data security learning and sharing conduct from the perspective of socio-mental persuaders and interfacing state of individual mind.*

Key Words: Information security, Knowledge Sharing, Trust, Pakistan

1. INTRODUCTION

It is explained the role of internet in any knowledge sharing organization as vital service in human being life. Organizational actions and events rely widely on web based technologies. Then again, data security is as yet a divisive issue for the clients and for the association [2]. Von et al., (2013) defined securing of information comprise on privacy, truthfulness and consistency of shared information. Information security rupture with the awareness programs; awareness about information security. Internet basically has massive setting in which information breaches has great chances [19]. There is placed an example of fake website about to get free antivirus for the systems and as the result the users lost their private information [22]. It is mentioned in the study that in the vigorous domain of internet the awareness on information security can be effective approach that also reduces organization cost on information-security. The researchers called the experts for providing solutions to these information breaches through knowledge sharing on information security that can not only save cost but also saves time. So, the saving cost can better spend on improving the information security solutions rather than re-inventing the maneuver [19]. There is directed a research on the sharing of knowledge about information-security in the online business where the results showed that respondents have low willingness to share their information due to their low confidence level, the hazard of trailing their job, the attitude and unfamiliarity among workers were most highlighted hindrances.

In this paper, a theoretical framework has been undertaken that shows how organization support and trust affects the motivational aspect of employees toward their state of mind; observed behavioral control, subjective standards toward securing of information through the intention and behavior of sharing information. Whatever is left of the paper is set up as takes after: The second area covers the hypothetical foundation of Triandis' model in connection with on inspiration (Motivational) hypothesis and the hypothesis of arranged conduct. The model and the different speculations

are depicted in third part. The fourth segment incorporates the explore system and gathering of information. The consequences of the estimation model, Contributions and conclusions are exhibited in fifth and 6th segment.

1. Theoretical basis of the Study

The current paper theorized information-security knowledge sharing under one important model Trinsdis' model and two essential theories; theory of motivation and the theory of planned behavior. "Organization support and trust do affect the motivational aspect of employees" inspires persons to deed in a firm way, and to recover a detailed performance. Sharing of knowledge is more expected to ensue when individuals are motivated. The hypothesis of arranged conduct clears up how state of mind observe behavioral control, and subjective standards influence people's goal toward particular conduct.

Previous study declared that assisting circumstances are effective factors which moreover the extra factors initiate a specific motivation it is added with notwithstanding vigorous expectations; a conduct can't arrive when there is an issue against such a conduct. Helping conditions are reasons that make a demonstration simple to do [4]. It is exposed that the inspirations related with persons' wants and outlooks can stimulate people to involve in an exact behavior. Motivation signifies the details for public's activities, wants, and needs. Inspiration describes the way and the details for a specific behavioral outline. Point boosts for one to perform deliberately.

The nonappearance of motivation has been expressed as a critical issue for data dispersion conduct, regardless of the sort of information to be collective [5]. It is included the detail "Natural and outside" motivations that can assume huge parts in the region of information partaking in associations. In this paper, inherent and outward inspirations have been pondered as huge viewpoints that influence representatives' state of mind towards sharing of data about securing authoritative data [6].

The hypothesis of arranged conduct clarified that all individuals' views, moods, activities and behavior are

inclined through their communiqué other persons. The researchers explained in ordinary words as on the off chance that individuals survey a conduct as hopeful (disposition), or they consider that generous others need them to do the conduct (subjective standards); then these ought to prompt propelled aims; and they would probably do as such.

On the other hand, there were some perspective nearby the association amongst expectation and real conduct. Some driving works exhibited that goal can't be the elite reason for conduct, where a man's control over his/her conduct is inadequate. Setting up the hypothesis of arranged conduct by observing conservable social control. In this approach, the hypothesis of arranged conduct can shield non-volitional conduct for imagining behavioral expectation and genuine conduct. The hypothesis of arranged conduct has been extensively valuable in the zone of the data framework and safety in current ages. It is concentrated that how obeying with data security authoritative systems frames in associations in light of the hypothesis of arranged conduct [11]. In the investigation of the hypothesis of arranged conduct was castoff to elucidate information sharing conduct grounded on state of mind, subjective standards and saw behavioral control. In the present research, the hypothesis of arranged conduct has been utilized to characterize how staffs include in data security learning partaking with a specific end goal to diminish the peril of data security ruptures in business places.

1.1 The Proposed Research Model and Relevant Hypothesis

Faith is credence that somebody or something is authentic, consistent, decent, and real. It is demarcated trust as a perception of the aspiration to be influenced by somebody or somewhat for safety. Trust can ensure to a relationship among people; and it is one of the basic figures of community. Trust impacts relations among and inside the social gatherings, for example, companions, relatives, associations, groups, firms and states. These sorts of inspiration are ordinarily given to the learning supplier as a kind of outer inspiration, established on the discussion connection amongst laborers and bosses in associations. Advancement describes to the specialist's efforts to guard association's data belonging, which are reflected as the representative's prize. This advancement stalks from association's hopeful evaluation of defended data. So, the current research assumes that receiving reputational factor and attaining preferment as exterior motivation have noteworthy properties on one's boldness to sharing intent about securing information.

It is included on organizational-support belongs to workers; worldwide principles about the grade to which a group admits and morals the workforce's involvement, and pays courtesy to their comfort. Organizational support communicates to workers' sentimental promise. Structural support also has been cited as a significant aspect in the receipt and usage of technology based information [21]. It is accentuated the status of administrative provision on the workers' choice to obey by securing information. The literature quoted the impact of motivational approach on learning sharing conduct in associations [20]. The outcomes

of this research exposed that workers incline to share their information with those whom their trust would most assist the organization.

The other studies done by Pi et al., (2013) demonstrated that specialists who watch the requirement for various leveled bolster, consider it as a legitimate promise towards the staff, and respond through duty towards the affiliation; while concentrating on definitive targets and strategies. This guarantee can ensure the authoritative data belonging by method for data security learning circulation devices [19]. Established on the previously mentioned reasons the paper accepts that:

H1&H3: *Organization Support has a constructive impact on workers' earning repute and Inquisitiveness gratification.*

H2&H4: *Organizational Trust has a confident effect on workers' gaining promotion and Self-worth gratification*

Shibchurn and Yan (2015) described intrinsic motivation imitate from a concern or, on the other hand get a kick out of the assignment that is not built on a desire for reward or from any outside constrain. Inborn inspiration can act naturally fulfilling and long haul, because of its delight. Hau et al. (2013) included in their review that characteristic inspirations are preferential by the "delight and fulfillment" in the information sharing procedure. Li et al., (2011) elucidated this desire come from curiosity satisfaction and self-esteem.

H5: *Inquisitiveness gratification has a optimistic impact on workers' knowledge sharing attitude*

H6: *Self-worth gratification has a positive impact on employees' knowledge sharing attitude.*

Demeanors plan on the bases of an individual's past or current encounters; and it expresses the support or disfavor to a question. Shropshire, Warkentin and Sharma (2015) clarified protest as everything in our setting, for example, a place, individual, a thought or an event. In extra showdowns, individual's state of mind speaks to one's evaluation of a thing, running from extraordinarily great to dreadful terrible. Demeanor additionally signifies to a man's hopeful or negative feeling towards a particular conduct. Hepler (2015) differentiated demeanor as an enthusiastic inclining that extents from an exceptionally negative to a gigantically positive. State of mind has fascinated the thought of numerous epicureans in the disparate area, in light of its capability to characterize a man's conduct. The settled convictions that a man has around a protest influences his/her state of mind and the demeanor influences his/her behavioral-aim. The investigations of numerous analysts uncovered that demeanor towards adjusting with data security authoritative strategies completely; and this mentality seriously impacts laborers' aim to comply with the arrangements. It is revealed that demeanor constructively affects a being's aim to information sharing [22]. In this review, we have accepted that:

H7: *Attitude toward information distribution has a constructive influence on workers' intention towards sharing toward information security.*

Subjective-standards are the results of individuals' perspective about a particular conduct. In detail words by Li, Zhang and Sarathy (2010), subjective standards specify to

whatever individuals, who are imperative to them, they simply consider a predetermined behavioral plan. Lijiao Cheng et al. (2013) clarify subjective standards as the social-weight on specialists to finish objectives, or to not play out, a particular conduct. Accordingly, we propose that:

H8: *Subjective standard towards information sharing have a positive influence on workers' intent towards sharing about information security.*

According to Ajzen and Madden (1986) work saw behavioral control portrays to the general population's capacity to finish a given lead. Cox (2012) characterize saw behavioral control is an assessment of the solace or effort in playing out the conduct; a man may, or may not, can play out the planned conduct; and this effects on the individual's convictions about their goals and activities. Stop et al. (2014) expressed in his review comes about that preparation and capacity to share are two noteworthy elements that influence learning sharing conduct. In the future, the ensuing speculation is proposed:

H9: *Observed behavior towards securing of data positively affects workers' expectation about data security information sharing*

In a tame supposition, research characterizes human conduct as being grounded on the standards, needs and expectations of a person. Lee (2014) clarified goal is a perceptual express that shows a confirmation to play out a particular deed now, or later on. Expectation incorporates arranging and mental activity to achieve an objective. Expectation is one of the imperative calculates the hypothesis of arranged conduct that has been contemplated in the field of data security conduct. The aim to satisfy with data security authoritative techniques (Vance Siponen and Pahnla 2012; Ifinedo 2014; Siponen et al. 2014), and the expectation to execute data safety conduct (Shropshire et al. 2015), and additionally data innovation ethical behavioral aims (Kreie Leonard Cronan Paul and 2004), goal to data security learning sharing (Park., 2014; Suhwan Jeon et al. 2011; Tamjidyamcholo et al. 2014) are all instances of research work that utilized aim as a central calculate their appraisal models. This examination paper expect that the aim to data security learning sharing noteworthy affects specialists' data security information sharing conduct get from the hypothesis of arranged conduct:

H10: *The information sharing intention has a positive impact on workers' information toward information sharing behavior.*

2. Methods

This review seeks after to extend and separate study on data safety on the one bolt, and involvement of information behavioral conduct as an agent and effective strategy to ease the danger of data security ruptures on the opposite side. The motivational hypothesis, hypothesis of arranged conduct and triandi's model helped the review to conceptualize data security information sharing conduct in Pakistani banking organizations. Quantitative method was applied for the development of theoretical framework. In command to know in what way sharing of information behavior is established in the securing of information situation, the active influences in securing data through knowledge sharing were composed from the evaluation of the literature; and formerly, the original model was established.

The data were collected by means of adopted questionnaire (see appendix-I) based on five likert scales by [19]. Partial least square has been cited as a suitable method to inspect the associations among proposed hypotheses [8].

3.1 Data Collection Procedure

The data were collected by targeting the Pakistani banking staff members (Alfallah Bank Limited, National bank of Pakistan and The bank of Punjab) who involves in the activities of internet communication and internet transaction. All the participated organizations have recognized information-security strategies and procedures; all staff members are following these strategies and procedures. The survey participants were aware with the value of securing information. Facts were collected during ten days from total of 380 respondents through convenient sampling. Adopted questionnaire by [19] and Vons (2016) was used. The questionnaire defined the determination of the research to the respondents, and formerly requested them to response to the questionnaire founded on their preceding knowledge and information. Table 1 depicts the detail on demographics of the respondents. Table 2 and 3 highlight the reliability and validity of the adopted questionnaire used for this study. The present study used the Wong (2013) (can see in Table 2) method for assessing & presenting reliability and validity by using PLS software.

Table 1: Wong Criteria for determining and presenting reliability & validity

Reliability				
Indicator of Reliability	What to look PLS?	to in PLS report.	Position in PLS	Value Observed in PLS
“Internal-consistency reliability”	“Reliability numbers”	PLS	→	Composite reliability should be greater than 0.7
Validity				
“Convergent Validity”	“Average variance extracted (AVE) numbers”.	PLS Overview	→	0.5 or higher
“Discriminant Validity”	“AVE numbers & latent variable correlation”	PLS	→	Off-diagonal value should be less than diagonal values.

Table 2: Reliability and Validity

Variable	Indicator	Loading	Composite reliability	AVE
Self-worth gratification	Sws1	0.7083	0.8377	0.5896
	Sws2	0.5923		
	Sws3	0.6931		
	Sws4	0.8769		
	Sws5	0.4356		
Perceived Behavioral Control	Pbc1	0.8148	0.8608	0.6098
	Pbc2	0.8302		
	Pbc3	0.8253		
	Pbc4	0.6363		
Attitude	Att1	0.8160	0.8656	0.6174
	Att2	0.7255		
	Att3	0.7750		
	Att4	0.8228		
Earning Repute	Er1	0.7929	0.8590	0.6076
	Er2	0.6119		
	Er3	0.8768		
	Er4	0.8114		
Gaining Promotion	Gp1	0.8355	0.8806	0.6493
	Gp2	0.8701		
	Gp3	0.7286		

	Gp4	0.7817		
I Gratification	Stf1	0.6670	0.8692	0.5739
	Stf2	0.8067		
	Stf3	0.8594		
	Stf4	0.6348		
	Stf5	0.8235		
Subjective Norms	Sn1	0.7855	0.8903	0.6704
	Sn2	0.7856		
	Sn3	0.8834		
	Sn4	0.8166		
Trust	T1	0.8065	0.8910	0.7199
	T2	0.8844		
	T3	0.7894		
	T4	0.8719		
	T5	0.8127		
Intention	I1	0.6938	0.9277	0.5112
	I2	0.6008		
	I3	0.7851		
	I4	0.7656		
Organizational support	Os1	0.6344	0.7755	0.6890
	Os2	0.5460		
	Os3	0.7742		
Behavior	Os4	0.7563	0.9067	0.6616
	B1	0.8152		
	B2	0.8722		
	B3	0.6967		
	B4	0.8060		
	B5	0.8648		

Table 3 Discriminant Validity

	1	2	3	4	5	6	7	8	9	10	11
1 Er	0.763										
2 Gp	0.118	0.739									
3 Ig	0.116	0.592	0.827								
4 Sg	0.114	0.523	0.591	0.767							
5 At	0.117	0.611	0.543	0.632	0.742						
6 Pbc	0.142	0.148	0.576	0.599	0.642	0.746					
7 Sn	0.141	0.143	0.149	0.466	0.598	0.673	0.760				
8 In	0.117	0.114	0.163	0.530	0.643	0.660	0.561	0.758			
9 Tu	0.114	0.523	0.591	0.148	0.576	0.599	0.642	0.660	0.759		
10 Os	0.141	0.143	0.149	0.466	0.598	0.673	0.530	0.643	0.566	0.756	
11 Isks	0.117	0.114	0.163	0.530	0.643	0.660	0.561	0.576	0.599	0.642	0.830

3.2 Measurement Model

Habibpor and Safari (2008) concluded SEM and [8] added that PLS (Structural technique) is the supreme suitable technique on behalf of assessing the measurement model factors whether they are reliable and appropriate for testing the hypothesis. The present study used Wong (2013) criteria in PLS (SEM) for testing the reliability aspect through composite reliability. As included by [8]; Hair et al, (2014) and Wong (2013) its value must be above 0.7. The validity

can be asses through correlational value and by average variance extracted. (See table 1). The present study adopted questionnaire fulfill as the criteria by previous mentioned literature which means that study can run the structural model for testing hypothesis. Average variance extracted of the dimension displays the convergent validity. AVE value above 0.5 shows an suitable convergent validity (Hair et al. 2014; Batool et al. 2015). (See table 2 for reliability and 3 for discriminant validity the diagonal values are greater than off

diagonal ones which proves presence of discriminant validity).

3.3 Structural Model

In partial least square incorporates a group of measurable ways to deal with evaluation of the hypothetical model. Basic condition showing is widely connected in the dissimilar investigation fields, because of its ability to isolate observational-blunders from the measurement of inactive factors. Partial least square software finds the relationship between the reliant, autonomous, and intervening factors. Structural technique reflects dependable measurements, once it evaluates the associations among the factors and investigates the general information fit to the applied model. PLS version 3.0 was castoff to regulate the models' factors (Batool et al. 2015).

The results displayed that the all pathways between the propose variables has been significant (See table 4) because their t value is greater than 1.96 a measuring standard for hypothesis testing with strong beta coefficient value (Batool et al. 2015). Beta coefficient measure how much an autonomous variable can bring alteration in the reliant variable by bringing one percent change in the autonomous variable.

3. Discussion

Specialists trust that the internet is a massive setting, in which programmers utilize dissimilar strategies and techniques to alter the attainable quality, protection and honesty of data for their own advantages. But the organization support that ultimately creates trust among companies employees will affect motivational factors. Inspiration clarifies the thought in people's practices, exercises, needs, and wishes. An expectation is the thing that animates the individual to act in a specific manner or leading for specific goal. The results of the information examination exhibited that; earning a notoriety and picking up advancement as outward motivational components; curious fulfillment and self-esteem fulfillment as an inherent inspiration has been effected by organization support and trust factor. One feasible explanation for this conclusion might be that organization support is an organizational commitment toward employees for that the organizations are paying to their workers. Trust on another hand comes from time duration and it's doesn't illustrate in the policies that workers need to be follow and they will receive benefit for doing trust. [11]. These motivational factors also have important effects on workers' attitude toward securing information and information distribution intention. The findings of the present study extend the previous researcher findings [8].

The results likewise uncovered that "state of mind, observed social control, and subjective-standards" have a noteworthy consequence on information security knowledge sharing intention that absolutely affects ISKS-behavior. This research spreads the thoughts on the importance of information security knowledge sharing in associations and estimated ISKS conduct by fuse of three basic speculations: motivational, hypothesis of arranged conduct and triandis show.

The study too assessed the whole practice of securing information through sharing of information marvels since the viewpoint of socio-mental aspect, connecting attitudinal, intent and conduct. To the finest of the present review discoveries, this is one of the main reviews that consider data security learning sharing as an incredible forthcoming and source in the Pakistani associations that abatement the danger of data security breaks. This forthcoming is discharged when specialists with changed levels of mindfulness and learning cooperate with each-other to defense the data belonging. Extra ramifications of this examination describes to the critical part of motivational-variables that absolutely influences data security learning sharing.

In this way, the delight of sociological-inspirations is fundamental for the accomplishment of securing information through sharing of information. The study can be beneficial to administrators aiming to recover securing information for sharing of knowledge as an incentive in their associations, helping the motivational-elements, for example, specialists' advancement status and curiosity satisfaction through their support and putting trust can be a suggestion to develop data security information sharing conduct. Administrations require knowing intrinsic and extraneous motivations, and after that to assign approaches to invigorate people inspirations. Data security masters, additionally the staff with steady data security information and mindfulness assume key parts in this measurement. The affirmation of specialists' capacities and proficiencies is legitimate to having any dynamic ISKS happenings in the associations. In this way, these possibilities and abilities ought to be held into thought by their chiefs. Rhee (2009); Vroom and Von Solms (2004 directed the intention toward information-security association and knowledge sharing. However, there is an as a dynamic and proficient strategy that mitigates the danger of security occasions. An information sharing reasoning is a value in associations (Koriat 2014). This not simply heightens data security discernment; but rather it additionally lessens the cost of data security in the organizations. That is the reason analyst ought to consider all the comprehensible techniques to disappoint data security blackmails. Every one of the consequences of the present review contribute toward the expansions and desires of above specialists alongside following up of their proposals by present review.

4. Conclusion

In heading to clarify the data security learning and sharing development in associations to the displayed look into paper. Paper has assigned positive connections by joining a few speculative techniques on human-conduct. The hypothetical model studied the whole strategy of data security learning and sharing (disposition, goal, and conduct). ISKS is a regarded marvel; organizations ought to, introduce an appropriate domain, in which to support this culture owed by its points of interest. An alternate real consequence of this examination specifies the impact hierarchical support and trust on motivational-variables and motivational elements on one's mentality towards data security learning and sharing conduct. In exact shape, outer motivational perspectives were found to have an all the more profound impact on state of mind. On the opposite side, ISKS is a significant movement between more than the single worker in any association; the

common objective in collaboration must be data security. Administrations more often than not have the part of group initiative. Their strategies can increase the level of their collaboration; and after that, they can diminish the danger of data security ruptures.

Conflict of Interest

The authors declare no conflict of interest for this paper.

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