

Effect on Organizations and Quality due to Changed Employee Work Behaviors caused by Political Instability in Developing Countries

(A case study of Pakistan's ICT sector)

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Abstract:

Uplift of any country depends upon its industrial strength, while industries get booms by investors (local and foreigners). Investor keeps many factors while doing investment at any country and political stability is one of them. When ever there are instable political conditions, industries get affected by many ways and one of them is quality due to employee behavioral changes. Pakistan is also one of developing countries which got affected badly by political instability. People in Pakistan have been going through mental trauma for the last one year due to instable political conditions and suicidal bombings. They have been insecure and disturbed. The outcome of this insecurity affects the organizations growth and revenue which in turn affects the economy of the country. When ever political conditions become worst, organizations especially those having export oriented business dealing with the foreign customers, have to look carefully on the current situations. They have to introduce change in their processes and policies. An example is of Enterprise DB (which used to operate in Islamabad, Pakistan) has shifted their development office to India. The outcome of these circumstances can be unemployment and decrease in average market salary along with employee frustration.

In instable political conditions, employee is affected with respect to society as well. This results in the de-motivation, insecurity, distraction, etc. hence, affecting in quality of work, resource slippage, schedule slippages, cost over run and many more. This can create negative image on global competitive markets. Client can go for other markets like India, Israel, Malaysia, China etc where although the labor cost is high but quality and on time delivery is somehow guaranteed. Already Pakistan is considered to be in tier-3 country among the software export nations and with the political instability, Pakistan's software industry can go in further downfall. In this research paper, the study will review the effect of the political instability on employee's behaviors working in ICT sector of Pakistan and will correlate them to show their subsequent effects on organizations and quality of product.

Purpose / Objective:

The study will examine the effects of political instability on employee work behaviors within ICT Industry of Pakistan. This will lead towards the effect of the changed behaviors, initially on ICT organizations in Pakistan and then on software quality. Then suggestions will be provided for organizations to reduce these effects.

Scope:

Our research will be limited to employees working within the ICT industry of Pakistan. Our sample will include Software houses, Telecom Organizations, Network and Securities providers and System Organizations.

Hypothesis:

ICT industry is service oriented sector where employees have direct relationship with organizational growth and software quality. When ever political instability takes place, the organizations and society becomes its victims. Employees are human as well, so any change in society (norms) and / or organizational policies have direct impact on them. Mostly the result is a negative impact on the employees work, ending up an effect on organization and may be on the quality of work/product.

Methodology / Approach:

This study is a combination of quantitative and qualitative research where the aim was to gather in –depth understanding of the employee work behavior and the reasons that govern this behavior, which is being effected by the political and security instability. Three types of questionnaire were designed in order to get feedback from professionals working in ICT sector. These questionnaires were for Managers, Quality department people and general employee respectively.

Findings:

Information Communication and Technology is a field where the employees have to put their full mental capabilities. When instable and insecure conditions arises in some country it results in employee lack of innovation, motivation, moral and ethical values while increase in frustration, job shifting / switching and even moving to other developed countries. It also results in lacking of initiative, hardworking, dedication, devotion, carefulness, creativity, efficiency, effectiveness and concentration. Organizations will be effected not only by the lack of investment and outsourced projects but also in schedule slippage, cost overrun or even discontinuity of the projects. Due to the above factors quality of work will decrease.

Originality / Value:

This paper defines the impact of political and insecure conditions in developing countries to the employees work behaviors, serving in Information Communication and Technology sector and this impact on organizations and quality.

Keywords:

Effect of Political and security instability, information communication and technology, employee work behavior, software quality, developing countries, Pakistan

Paper Type:

A conceptual paper which is a case study based on the political and security conditions of Pakistan.

Abbreviations:

Abbreviation	Definition
PI	Political Instability (including security instability)
ICT	Information Communication and Technology

1. Introduction

This study will examine the effects of political instability on employee work behaviors within ICT Industry of Developing countries and for case study Pakistan ICT sector is studied. This will lead towards the effect of the changed behaviors, initially on ICT organizations in Pakistan and then on software quality. So in this research will try to figure out

- Effects of political instability on employee work behaviors
- Effect on organizations due to these changed behaviors
- Effect on software quality due to above effects

After doing above suggestions will be provided about ways for organizations to reduce these effects.

2. ICT Industry of Pakistan:

The ICT industry in Pakistan is in its infancy and is struggling to catch up with the regional and global industry. The IT industry of Pakistan is currently valued [1] over USD 2 billion with an IT workforce of 110,000, growing at almost 20,000 a year. There are more than 125 ISO certified and CMMI rated IT firms in Pakistan. The industry is facing a serious shortage of quality technical and marketing professionals [15] and is unable to compete its neighboring countries.

3. Data Collection Method:

For this research three forms are designed. All the data is gathered by these three survey questionnaires. Survey questionnaires were divided into the following three categories. Data was collected only from professionals and no students were targeted.

3.1. Employee Opinion:

For employee opinion, intended audience is general employee from any department but serving ICT sector of Pakistan. This is a generic form which is used for gathering data about political instability effects on employee regarding their work and behavior.

3.2. Management Opinion:

This questionnaire is designed to get management opinion about effect of political instability on employee and its subsequent effect on organization. Intended audience is managers, team leads, and higher management.

3.3. Quality Department Opinion:

This questionnaire is designed to get quality department people opinion about effect on quality due to political instability and its effects on employee behavior. Intended audience is people working in QC, QA, QM, QI and support department.

As this research is investigatory so all above questionnaires are composed of two portions which are

1. Quantitative Portion
2. Qualitative Portion

Purposes of these surveys are to collect enough data so we can answer our research questions and their sub questions. The details of these research questions and sub questions can be found in Appendix II. After compiling results we will be able to suggest what employee, management and quality department people think about effects of political instability and how it effects organizations and quality.

4. Data Collection:

In this research overall 51 people participated from 30 organizations working in Information, Communication and Technology sector at Islamabad, Lahore, Karachi and Peshawar. More precisely 29 professionals took part in employee, 13 in management and 9 in quality department opinion survey.

5. Limitations:

Research is based on political conditions from 1st December 2006 to 1st December 2007 in Pakistan. Only major ICT cities were targeted which included Islamabad, Rawalpindi, Karachi, Lahore and Peshawar.

6. Data Analysis and Findings:

6.1. Employee Analysis:

The data suggests that although over 85% of employees are not either affiliated with any political party or taking part in political activates and having either minimal or no affiliation, yet 55% employee's interest has raised in politics due to instability which means that many of ICT sector people are concerning about politics and more then half of ICT employees are taking interest in politics now (after instability) so any condition effecting it more towards shakiness, like one of the former prime minister and lifetime chairperson of a large political party in Pakistan was killed in December 2007, will leave a rational impact on their behaviors because when ever some body takes interest in something and it gets instable it must leaves some effect on him which are mostly negative [16]. This also shows that political and security instability have effects on employee behavior which is being complimented by survey that over 65% people have gone some change in their work style due to these conditions. In excess of 72% people are facing fear and insecurity feelings. Nearly 72% employees feel that their motivational level has changed and out of them 81% feels that this change is negative. When some one is de-motivated and also facing fear then it is extremely difficult for him/her to concentrate on work which may lead towards producing lack of quality work or even no

useful work. Regarding ethical behaviors 50% employee feel change and out of these 66% feels a negative change which is not a good thing in a civilized human society/organization ethical behaviors should be moving upwards not falling downwards. Over 50% ICT sector employees are dealing with overseas customers and more than 60% think that their behavior with employee has changed so this political instability definitely have impacted on organizations dealing with foreign projects. A huge portion of 89% employee feel mental stress and one can easily say that this mental stress will have a negative impact on organizational productivity and software quality because software is considered as a game of mind. When mind is in trauma game will disturb. Nearly 83% ICT sector professionals surveyed feel life and job insecurity which tells that IT sector is facing problems like lack of revenue, growth etc which can lead in future towards downsizing . This already has been done in some multinational organizations which have shifted their offices to other countries in the region. Majority of people (89%) wants to remain in IT sector even though this instability remains in the country. 82% people responded that after instability employees are spending more time in political discussions at offices while in excess of 50% people face such situation when they wanted to come office but law enforcing agencies have not allowed them, more than 50% notified that they have some important task like project deadline or customer meeting scheduled at that day when they can't reach offices, if these conditions were stable then this time would be invested in work related activities which will result in better productivity. Now these things are not good for organizations at all as when deadlines or important customer meetings are postponed it may result in schedule slippage, cost overrun and to catch-up up these two things quality will be disturbed or even in contracts cancellation. 96% professional agreed that foreign investment would be much higher (in terms of revenue, outsourcing projects, call centers, communication networks, jobs etc) in Pakistani ICT sector if these political situations would be better also in that case there will be more job opportunities and according to supply and demand rule average salary packages would be much higher.. It is facts that before operating in any country organizations do SWOT, PEST [18, 19] analysis. In PEST political conditions are directly examined while doing SWOT analysis political instability is weakness and also a major threat to business. Intra team's communication is a necessary factor in ICT sector while according to survey 57% people believe that due to conflicts in political opinions this communication can suffer. 62% respondents consider that documentation, 48% agreed on attendance sheets and time card marking, 35% think that client meetings, 51% voted for improper check in and check outs, 42% opted in favor of lack in requirements gathering while 60% suggest that break timings have suffered due to political instable conditions.

89% respondents notified that there is no change in their working hours due to instability but in the same time majority commented that they are facing situations where they are not allowed or they can't reach office due to instability. 42% think that they will not compromise on quality even if it takes more time. This means that time has lost but organizations are not forcing employee to work for extra hours also which can cause schedule slippage. In instable conditions business can lack down [16 , 18] which will effect average pay scale, according to survey 62% people supported that it will decrease while only 3% voted for increase.

Employees do share their views about the circumstances happening around them and this is wastage of time. When they share their views they also think on other's views as well so the cumulative time is much higher. The maximum difference between time spent in political discussion before and after instability is 80 minutes (which is quite high) while minimum time is in negative which shows that people were talking about politics earlier but when they saw instability they were so de-motivated that they tried to talk less. Psychologists suggest that when ever some one seems things regularly he tries to ignore them. The same situation applies to these few employees who have reduced their discussion time in politics. Average time variation recorded is 19.82 Minutes. Employees are spending up to 90 minutes at office which is quite huge.

6.2. Management Analysis:

Data shows that nearly 85% managers agreed that their customers are concerned with political instability; some even suggest that when ever they talk to customers (especially foreign) the first thing they talk about is instability and schedule. Pakistan ICT industry is already lack of qualified resources therefore there is no downsizing going on and 100% managers agreed on this. Yet 75% managers reported about lack of new job openings due to these conditions. Also mostly managers (75%) agreed that there is no change in average salary package. When we observe overall some organizations even do downsizing like E-DB, DRL etc but experienced employee get job quickly due to human resource shortage. Only 23% respondents agreed on resource slippage due to political instability. As we can infer from employee analysis that time has been wasted in different forms thus over 61% managers voted about facing schedule slippage. 75% Managers think that employees are spending more time in political talks, discussions, news readings etc than before. 61% manager's important task regarding project or customer meeting has been affected due to instable conditions. Manager to subordinate communication also disturbed as 75% managers agreed on this.

When organizations are trying to maintain their image they are also starving to deliver things on time, this has been inferred from 72% manager's first choice to deliver on time rather concentrating on quality. 75% managers opted for no change in their working hours.

Like employees, managers also engaged in political discussions during office timings. Difference between "before and after (during)" instability ranges from 0 to 40 minutes, averaging 18.8 minutes. Now they are spending up to 60 minutes at office.

6.3. Quality Department Analysis:

Quality department work is the most import in ICT organization. If these people face disturbances then one say that work product quality will directly suffer. According to data collected 100% responded that political instability has affected their important task, deadline or customer meeting. It clearly states that quality has endured due to political and security instable conditions. 77% realized that "new" and "not fixed" bug's ratio has increased while over 62% favored in the change of releases and build schedule in such conditions. Normally client is not so much conscious about quality yet it has been observed that nearly 55% responded that their client has concerns relating quality due to

employee changed behaviors. One good thing is that approximately 78% quality professionals suggest that the conflicts due to variant political opinion is not effecting intra department communication, which may result that processes within quality departments are stronger then other departments, yet 55% voted that quality has disturbed due to lack of communication. Results of question 14 (a – p) reflects that software understandability, completeness, conciseness, consistency, maintainability, testability, Structuredness, efficiency, proper documentation and internal requirements gathering has affected while self explanatory coding and taking backups may have affects.

Quality department also realizes that in case of pressure situation 62% will prefer to deliver on time rather taking more time and focusing enhancement of quality. 66% think that changed behavior has strong effect on employee queries, complaints and satisfaction level while 55% believe that average pay scale can decrease in such circumstances.

Like employees and managers quality professionals also been spending time in political discussions. Maximum change in political discussions before and after/during instability is 35 minutes, minimum 10 minutes while averaging 22 minutes. Now they are spending 15 to 60 minutes in political discussions at office.

6.4. Changes in Employee work behaviors due to P.I. (Political Instability):

As shown in analysis interest rate in politics is increasing and employees are talking about politics within office timings. They are wasting more time discussing the uncertainty, gossip and related versions of the stories. Newspapers, news websites and news channels are being discussed almost round the clock. The focus on work and projects has decreased. Team work and communication has disturbed. Their attention form work has deviated and if the brain is not there it means that there is no point working in a team or individually.

Country is facing worst conditions regarding security. According to BBC 57 suicidal attacks hit the nation in different cities with in one year taking hundreds of lives. Lowest ratio of blasts was in Lahore where ICT sector employees have less insecure feelings then other cities. Survey suggest that employees working in ICT sector of Islamabad Rawalpindi, Peshawar and Karachi are very much scared and feeling insecurity. They want physical on job security and security of their belongings. It also put employees in some mental distortion and stress; moreover tense mind can never give perfect results. Professionals are facing lack of concentration on work. P.I. has deceased moral, motivation and interest in their work which is badly affecting schedule; number of bugs produced are increasing etc.

Professionals are thinking about second nationality of any first world nation or at least getting immigration. Pakistani ICT sector is already facing lack of qualified resources and when cream will move out of the country, it will create a huge shortage of qualified resources as majority educational institutions are not able to produce trained human resource which can immediately be integrated in professional environment.

People dealing with foreign customer are under fear for job and project insecurity (Digital Research Lab faced this situation) as foreign customers do have other options in

the region. This P.I. already has affected Pakistan ICT sector in terms of less number of outsourcing projects and revenue / offices shift to other regions. Like Microsoft has opened their development office in India even where labor cost is higher than Pakistan. The only attraction they have is political and security instability. It never happened that army rules over the civilian government and announces any form of marshal law.

These conditions forced employees to start thinking about the IT future in Pakistan. It is a fact [16, 18] that when ever political and security conditions become worst in a country it affects all the industries in that legion. The same goes with ICT. Currently they are many organizations in this sector which are either foreign based organizations or working on outsourced projects from other nations. It includes Telecom, IT, Call centers etc. When P.I. conditions will fall, these will move to any other part of the region. We are already in tier 3 nations in software production. If conditions were not improved, professionals will start thinking about their future. Over 52% respondents agreed that pay scale in ICT sector can decrease (may be due to lack of projects, decrease in revenue or growth) which is another important factor regarding employee de-motivation.

6.5. Effects of changed behavior on organization:

Organizations remains close for some days and employees may leave early when there is instable conditions which results in heavy work burden for catching up schedule. Survey data shows that mostly organizations are not opting for extra work hours. This can lead to schedule slippage. Employees are also reluctant to go outside for data gathering and troubleshooting problems. Security concerns make people less motivated which results lack [20] in initiative, hardworking, dedication, devotion, carefulness, creativity, efficiency, effectiveness and concentration. In instable conditions a reasonably good margin of employees thinks more about themselves? What will happen? What is going on? Who is Responsible? And not thinking about work? What am I doing and what remains next in office? Changed behaviors also negatively impacted productivity which results in loss of revenue / profit but this is out of this research scope. Majority of respondents agreed upon change in their deadlines and also disturbances to meetings with clients. Employee dealing with customer has affected which can result in discontinuity of projects or even after completing this project cline may not grant any further contract to organization. Enough office time is being wasted in political discussions. Break timings are misused. In general organizations are lacking due to changed behavior in providing quality of service to internal and external customers

6.6. Effects of changed behavior on quality:

Employee changed behaviors due to P.I. creates problem to accomplish all the quality related tasks in the given time

1. So therefore one has to either compromise over quality or
2. Shall need more time to ensure quality, also
3. It disturbs the flow of working of a department

An ICT client has normally three perspectives time, cost and quality. From data collected it has been proved that organizations did faced wastage of time, yet management and quality department majority likes to deliver work products on time. Now if they increase

cost it will have immediate bad effect and client may cancel contract. In this scenario it can be inferred that quality will get disturbed.

It creates harassment among people in a way that it encapsulates the people and they care more about themselves and their families rather than their work which can cause lacking in PPQA, auditing and also can face problem in quality implementation due to stressed behavior of other employees. One factor is that during exploratory testing, testers cannot really concentrate while thinking of what is going around in an unsettled society. I feel that this instability results in lack of an effective testing. Client is now more concerned with software quality. Due to the changed behaviors organizations are facing difficulty in running processes and it is extremely difficult for small and medium organizations to work on process improvement. Survey results suggest about effect on increase of bugs (new and rejected) which suggest developers lack of focus, inter teams communication and can have negative effects on software understandability, completeness, conciseness, consistency, maintainability, testability, structured ness, efficiency, proper documentation and requirements gathering.

6.7. Effect of political instability on different cities:

Regarding survey results Islamabad, Karachi, Rawalpindi and Peshawar were affected more than Lahore. Lahore seems to be politically and security wise stable that's why professionals working there got less affects.

7. Recommendations:

7.1. What organizations can do to overcome these effects on employee:

It is necessary for organizations to take immediate actions to reduce P.I. effects on their employees, this will be beneficial for organizations work progress and increasing quality of service and work products. Actions needed by organizations can be summarized as (not in priority order)

1. The Management should tell the employees about the importance of their projects and impacts in case if the company not deliver the project at time what are the intricacy face by the company in future and on the employee's job security.
2. Provide some kind of recreational activities (if possible) such that indoor games, LAN games, recreational trips, outdoor tournaments, get together parties.
3. Provide employee job security by telling them that nothing will happen with respect to job provided that they concentrate on work.
4. Provide employee physical security and also can provide life / medical insurance. Do strictly examine the people entering the organization. People feel motivated when they see organization is taking concerns relating them. Organizations have to adapt the safety first policy and then organization.
5. Motivate employees to handle these Political instable conditions like guiding, empowering, training and involving them
6. Try to create such atmosphere to show that there is nothing happened with respect to organization and work.

7. Provide such environment where people can work from homes in case of any instability. For example Elixir Technologies is trying to arrange a set up (nearly done) where employees can perform their duties at home in spite of coming to office when the conditions were not stable enough for them to reach office.
8. The organizations can pressurize government to follow the paths of democracy through their associations like PASHA (Pakistan Software Housing Authority) etc. and must encourage the democratic thoughts within their organizations. This will fulfill dual purposes. First employees will be motivated that organization is taking care and secondly organization good will be increased in the customer eye.
9. Organization should make client dependent on them rather than depending on clients. Its very difficult but can achieve by producing quality products like TeraData or by having proper process institutionalizations. Best way to do this is achieving CMMI appraisal which results in improved processes and hence product quality will be improved. By this way we can make our products so strong that client has no way to escape, this will give confidence to our employee.
10. Organization can work on products so that employees can work with out client pressure until the product is released. Limitation is that very few organizations in Pakistan can invest on products and wait for revenue generation till it has been launched. Best way is to do project and products simultaneously where employee are a bit satisfied that incase of projects failure organization can shift them to product. Example organization for this strategy is InterActive Communications which other then doing above also avoid short term projects and focus on long term projects.
11. Management should avoid talking about politics and focus on increasing communication relating work.
12. Organizations can have a department to deal such issues like at Mobilink they have security department which always remains in touch with employee. Another example can be like one of the InterActive's clients at Karachi needed some technical professionals for troubleshooting while the conditions were not stable there due to blast in receptive gathering of a foreign prime minister of Pakistan. Interactive management consulted their security advisors and on their recommendations they took decision of not to send their technical people there and waited until situation gets better. These kinds of decision increases employee motivation, loyalty and sincerity.
13. Do better HR management, one form can be by applying internationally accepted employee related rules and regulations.
14. Make proactive organization strategies like must care political instable conditions while doing planning, estimation, scheduling etc also perform risk analysis more carefully.
15. Realize employees that company is stable and growing.

7.2. What employees can do to reduce these effects:

Employees working on foreign projects have to show like there is nothing will be happening to their customer, they have to be more careful about deadlines (for this they may have to work extra hours). This will result in restoring image. If they can satisfy their customers or management which are sitting abroad they certainly will get business

and revenue. Try to have minimal effect on the projects and build the positive image of the country to the outsiders even in these conditions.

8. Conclusion:

This instability is occurring consistently and new and newer incident creates more and more depression. Pakistan is also in the category of Iraq and Afghanistan [10], the only difference is that people there are fighting against other countries army while here they are fighting against their own countries law enforcing agencies. Situation may not heal up quickly and it will continue effecting employee work behaviors and increasing their frustration, insecurity while decreasing their moral and motivation. This all will affect organizations and quality. To get through positively with minimal negative effect in these situations organizations have to play their rule other wise conditions may become worst.

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