



# **ELECTRONIC CONTROL AND ITS IMPACT ON CORPORATE PERFORMANCE: EVIDENCE FROM JORDANIAN COMMERCIAL BANKS**

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## **Abstract**

*The main aim of the study is to explore the relationship between electronic control and corporate performance of Jordanian commercial banks. It also aims to investigate possible obstacles that may face Jordanian commercial banks and hampers the application of electronic control. The population includes all employees in seven selected major Jordanian commercial banks operating in Jordan. Questionnaires were distributed randomly to 225 employees in the selected banks, 99 of whom returned them fully completed (response rate = 44%). The study found a significant statistical impact of e-control motives, benefits and uses on corporate performance in Jordanian commercial banks. The study recommends that Jordanian commercial banks should take care of e-control systems to cope up with the growing nature of banking operations.*

*Keywords: Electronic Control; Controlling; Corporate Performance; Jordanian Commercial Banks; Jordan*

## INTRODUCTION

The use of computer networks and systems nowadays has widely expanded into numerous fields such as the field of management activities in all types of businesses. Users as well as employees use computers to carry out their daily job tasks, be it routine and non-routine tasks. Planning activities, administrative tasks, budget preparations, report writing are few examples of work activities that need computers and software to accomplish.

Based on the necessity of computers usage in the workplace, electronic control has become very vital and should be applied. Capable human controllers and inspectors as well are urgently needed to carry out electronic control tasks.

According to Jones and George (2003), the application of electronic control, utilization of information technology within the work context intend to improve performance standards, achieve accuracy of results, minimize risk that face both controllers and inspectors without the need to directly interact with the staff, and gain wide range of benefits.

Control is regarded as one key function of management. Through control, organizations can achieve work objectives in a way that respect agreed-upon work principles and policies. In addition, Laudon and Laudon (2004) claim that control plays an important role in all management levels, be it top, middle, and lower level management levels. In this regard, control is viewed as a tool to check whether work is in accordance with stated plans and regulations, and determine the weaknesses so as to cure it and prevent its reoccurrence.

### Importance of the Study

The study importance stems from the following points:

- The importance of the subject since it addresses very sensitive subject in the management process.
- The impact on results that contribute to the development of control systems and guarantee the speed of task accomplishment.
- The wise selection of the study population, Jordanian commercial banks. Banks are the most accurate economic entities through its transactions that require very efficient control so as to maintain high level of performance and guarantee quality of outcomes by the use of information technology, and avoid direct communication between employees and inspectors.
- It enables build up dependable data banks to be a solid reference for future purposes.

### Objectives of the study

- To explore the relationship between electronic control and corporate performance in Jordanian commercial banks.
- To investigate possible obstacles that may face Jordanian commercial banks and hampers the application of efficient control.
- To investigate the need for electronic control.
- To investigate top management compliance of electronic control applications.

### Problem Statement

Management should be aware of possible obstacles that may hinder the effectiveness of electronic control on corporate performance in Jordanian commercial banks. The faulty concept of electronic control application might cause inefficiencies that lead to disadvantages of performance. This in return calls for applying new methods and control tools suitable to the line of business and the qualifications of employees. Accordingly, the study problem focuses on the following key question that needs an answer to:

### Key Questions

1. What is the relationship between electronic control and corporate performance in Jordanian commercial banks?
2. What are the tools and methods of electronic control in Jordanian commercial banks?
3. How effective is electronic control in enhancing the level of corporate performance?
4. Do Jordanian commercial banks need electronic control?
5. How absent is electronic control in Arab banks?
6. Is electronic control important according to bank managers' point of view?

### Study Hypotheses

1. There is a significant statistical impact at the level ( $\alpha \leq 0.05$ ) of the ***motives of using electronic control*** on corporate performance of Jordan commercial banks.
2. There is a significant statistical impact at the level ( $\alpha \leq 0.05$ ) of the ***Benefits of E-control*** on corporate performance of Jordan commercial banks.
3. There is a significant statistical impact at the level ( $\alpha \leq 0.05$ ) of the ***Uses of E-control*** on corporate performance of Jordan commercial banks.
4. There is a significant statistical impact at the level ( $\alpha \leq 0.05$ ) of ***E-control challenges and counter measures*** on corporate performance of Jordan commercial banks.

## THEORETICAL BACKGROUND

Recent and successive development in information technology using computers has affected management and accounting systems in almost all types of companies. (Laudon & Laudon, 2004). Such development, as a result, has deeply affected the style and methodology of internal and external auditing. The personal characteristics of reviewers and auditors have also been affected by such development.

Control is a management tool that guarantees the right flow of work both efficiently and effectively so as to achieve the set objectives. Henry Fayol (1916) defines control as a way of making sure that everything is according to preplan, formal instructions, and agreed upon principles, and the aim of control is to diagnose faults and weak spots, cure them, and prevent them from reoccurring, and control is imposed on things, people and procedures.

In the words of Robbins and Coulter (2016): "Control is the process of monitoring activities to ensure that they are being accomplished as planned and correcting any significant deviations." Controlling as a function of management is of great value and importance in a business organization to ensure that the actual state of affairs of a business is along the lines of what is expected to be. One of the most obvious benefits of controlling function is that it provides the accurate information which is what is wanted for effective decision making process as well as maintaining effective functioning state of a business. Control is not just limited to determine whether or not the plans are being adhered to, but it also leads to identify the reasons of deviations and to take corrective actions accordingly. (Simons, 1990).

Controlling means validating if the activities occurring are in confirmation with the actual plans prepared and accepted, instructions issued and principles established. The controlling function also helps in the effective and efficient application of enterprise resources in order to accomplish the planned goals. Controlling gauges the deviation of actual performance from the planned performance, establish the causes of such aberrations and helps in adopting corrective actions. (Hill & Mcshane, 2008).

Thus, controlling can be defined as a managerial function to ensure that activities in an organization are performed according to the plans. Controlling also ensures efficient and effective use of organizational resources for achieving the goals. Hence, it is a goal oriented function. (Robbins and Coulter, 2016).

Controlling is thus a very important and integral part of everyday management. It is a process that helps ensure business success and stability and cannot be separated from other functions. This is because the planning effectiveness and all other functions are gauged and understood through the process of controlling.

Controlling is the process of assuring the performance as per standard. (Hill & Mcshane, 2008). It is the comparison and verification process of the actual performance with the standard performance. It also analyzes whether the actions taken are as planned and taking corrective action. (Al-Alaq, 2008). It is known as the key to management for implementation of plan in actual field. It also prevents and corrects deviation from plans.

E-control is based on using computers in practicing control processes according to computer programs solely designed for this purpose so as to achieve economy of scale in efforts, time, and cost to get to conclusions with least risk and accuracy. (Chalykoff, & Kochan, 1989). The importance of control stems from the following points:

- The absence of efficient control system leads to increased higher costs.
- Efficient control systems encourage superiors to delegate authorities to subordinates.

The use of computers to eliminate problems associated with manual systems in the processing of data, and to take advantage of the advantages achieved by internal control systems such as accuracy and symmetry, the computer is more accurate than humans in the processing of data and the implementation of similar operations in a symmetrical, and does not have the motives of treason or lack of loyalty to the Foundation. (Chalykoff, & Kochan, 1989).

The audit process also plays an important role in complementing other administrative functions, both in terms of the optimal use of the resources available to the establishment, and in terms of trying to determine the efficiency of management. It seeks to achieve the desired objectives. (Simons, 1990).

Controlling is an important function of management which all the managers are required to perform. In order to contribute towards achievement of organizational objectives, a manager is required to exercise effective control over the activities of his subordinates so as to motivate people to achieve their goals. (Flamholtz E. G 1996).

The objectives of the controlling function in an organization stems from the following key objectives and benefits (Abbas, 2003); (Malmi and Brown, 2008): Accomplishing organizational goals, judging accuracy of standards, making efficient use of resources, improving employee motivation, ensuring order and discipline, facilitating coordination in action, guides in achieving goals, simplifies supervision, delegating authority effectively, correcting action, smoothing operation of the organization, minimizing cost, and better planning. According to (Zéman, et al, 2013), the controlling tasks are as follows:

- Improving accounting system towards management accounting.
- Planning – strategic planning and operative planning.
- Plan-fact analysis -cost analysis, income analysis, risk analysis, expected future trend analysis.

- Information provision: managerial information system development of reporting system with an appropriate IT support.

## PREVIOUS RESEARCH

The relationship between control in general and performance is addressed in numerous research studies. Several of these were reviewed and summarized in this section.

Saidi A. (2018) investigated the effects of electronic payment platforms on bank performance. The sample consists of the fourteen [14] deposit money banks listed on the Nigerian Stock Exchange Market. The study period ranged from 2012 to 2017, respectively. This study used the Sortino index, which is a single index performance indicator. Findings of the study include the following points:

1. The point of sale (POS) has an increased effect on the performance of banks on the exchange.
2. An increase in the use of POS machines raises the visibility and coverage of banks.
3. The advent of mobile banking has brought positive effects on bank performance.
4. The Online (Web) medium of electronic payments has increasing effects on bank performance.

A recent study by Joseph M. Vekya (2017) explored the effect of e-banking on the profitability of commercial banks. The population of the research consists of the 43 commercial banks in operations as at end of 2014 in Kenya. Results from multiple regressions indicate that there is a positive significant relationship between ATM transactions and bank profitability. A unit increase in ATM transactions leads to an increase in ROE (bank profitability) by 1.662 units. The study recommends that commercial banks increase their ATM networks and encourage the use of payment cards at POS terminals.

Siddik et al (2016) investigated the impact of e-banking on the performance of Bangladeshi banks measured in terms of Return on Equity, Return on Assets and Net Interest Margin. Results indicate that e-banking contributes positively to banks' Return on Equity. This study encourages other banks in developing economies who have not adopted e-banking yet to introduce such banking system in order to experience improved profitability as revealed in this study.

Abaenewe et al (2013) investigated the profitability performance of Nigerian banks following the full adoption of electronic banking system by utilizing secondary data extracted from the Nigerian Stock Exchange Fact Books and published annual reports of four sampled banks. The study revealed that the adoption of electronic banking has positively and significantly improved the returns on equity (ROE) of Nigerian banks. On the other hand, e-

banking has not significantly improved the returns on assets (ROA) of Nigerian banks. The study recommends that banking industry should adjust to full and effective deployment of information technology due to its sophistication since the technology is irreversible with relative perceived advantage.

Qrait (2011) explored the controlling function of the Syrian central bank on the Islamic banks in Syria in terms of credit and debt data. Syrian International Islamic bank was the target bank of this study. The financial data relates to the bank's annual report of 2007-2008. The results indicate that the central bank has full control on the Islamic bank in terms of debt and credit using traditional tools of controlling.

In addition, a study by Stanton & Barnes-Farrell (1996) aimed to assess effects of electronic performance monitoring on individuals working on computers in an office-like environment. Participants (N = 108) worked on a computerized data correction task under six experimental conditions that varied the amount of control over performance monitoring and knowledge concerning specific monitoring events. Results confirmed to relate personal control, satisfaction, and performance. Participants with the ability to delay or prevent electronic performance monitoring indicated higher feelings of personal control and demonstrated superior task performance. Participants with exact knowledge of the occurrence of monitoring expressed lower feelings of personal control than those from whom specific knowledge of monitoring was hidden. A relevant study by Alhodaithi (1993) found the following:

- There is a weakness in the application procedures of organizational control regarding access to and security of banking data.
- There is a modest control on documentation, development, and control over operations and internal control.
- There is a high level of control application on inputs and outputs.
- Medium care is shown regarding control carried out internally, while care is minimal regarding external control.
- Modest care is shown in regular assessment of internal control whether done internally or externally.

## **METHODOLOGY**

This study is set to be descriptive analytical type of study, thus it explains and analyzes concepts relevant to control, performance and relationship between them. And then explores the effect of electronic control and its role in enhancing efficiency and performance of Jordanian commercial banks' employees. A questionnaire was developed for this purpose as shown in appendix (1).

In order to effectively examine the relationships between e-control and corporate performance through its four dimensions (motives of using e-control, benefits of e-control, uses of e-control, and e-control challenges and counter measures), we chose seven major banks operating in Irbed district of Jordan as our target population. These banks are: Housing Bank, Arab Bank, Jordan Commercial Bank, Audeh Bank, Islamic Bank, Islamic Safwa Bank, and Jordan Kuwaiti Bank.

A sample of (225) elements representing all administrative and academic positions was randomly selected for questionnaire distribution. Only (99) questionnaires were suitable for analysis. The effective response rate was approximately 44%.

## ANALYSIS AND DISCUSSION

### Internal Consistency

The reliability of the measurements was evaluated by Cronbach alpha coefficients. The scales of all measures appear to produce internally consistent results; thus these measures are deemed appropriate for further analysis because they express an accepted validity and reliability in this study. Table 1 shows the results for Cronbach alpha coefficients. As indicated in the table, the value ranged between (0.80-0.86) indicating more than acceptable measurement reliability.

Table 1: Internal Consistency factors using Cronbach Alpha (N=99)

Dimension	No of items	Internal Consistency
Motives of using Electronic Control	11	0.80
Benefits of E-control	11	0.83
Uses of E-control	9	0.82
E-control challenges and counter measures	13	0.86
Overall E-control	44	0.94

### Participants

Questionnaires were distributed to 225 employees in the selected banks, 99 of whom returned them fully completed (response rate = 44%).

As shown in table (2), (62.6 %) of the respondents are men. The overwhelming majority of respondents are aged 30-less than 40 years (n=99, 44.4%). Table (2) shows the rest of demographic data of respondents.



Table 2: Demographic Variables: Frequencies and percentages (N=99)

Variable	Category	total	Percent (%)
Gender	Male	62	62.6
	Female	37	37.4
Age	20-less than 30 yrs.	43	43.4
	30-less than 40 yrs.	44	44.4
	More than 40 yrs.	12	12.1
Education	Diploma	15	15.2
	Bachelor	70	70.7
	Higher education	14	14.1
Experience (yrs.)	1-less than 5 yrs.	41	41.4
	5-less than 10 yrs.	45	45.5
	More than 10 yrs.	13	13.1
Total		99	100.0

### Hypothesis Testing and Discussion

**First Hypothesis:** There is a significant statistical impact at the level ( $\alpha \leq 0.05$ ) of the *motives of using electronic control* on corporate performance of Jordan commercial banks.

This hypothesis is tested by extracting means and standard deviations of respondent's answers to all eleven questions of the motives behind using electronic control. One sample t-test is also being carried out to test the hypothesis. Table (3) shows the results.

Table 3: Means and Standard Deviations of e-control motives at Jordanian commercial banks (N=99)

Rank	No.	Item	Mean	SD
7	1	E-control helps improve work and enhances awareness of performance gaps.	3.70	1.17
6	2	E-control helps enhance bank performance.	3.74	0.83
10	3	The use of e-control limits risks that employees may encounter.	3.65	0.88
1	4	E-control positively supports the proper selection of employees so as to have the right person in the right position.	3.89	0.89
10	5	E-control enhances the seriousness of work.	3.65	1.03
4	6	E-control enhances corporate confidence in the bank's incentives scheme.	3.77	0.91
7	7	E-control enables employees refer to historical data.	3.70	0.93
2	8	Flexibility of e-control permits professionals detect gaps in the bank service processes.	3.83	0.95

9	9	E-control saves managers' and supervisors' times and efforts.	3.69	0.98
3	10	E-control is regarded more efficient than traditional control.	3.80	0.90
4	11	The use of e-control (i.e. code- readers) enhances bank's performance.	3.77	0.92
E-control motives as a whole			3.74	0.55

Table 3...

As shown in Table (3), the item “E-control positively supports the proper selection of employees so as to have the right person in the right position” scored highest with (3.89) mean. Next, the item “Flexibility of e-control permits professionals detect gaps in the bank service processes” came in the second rank (3.83). While the item “E-control enhances the seriousness of work” came last (3.65). As a whole e-control motives mean scored (3.74).

Table 4: Means and Standard Deviations of T-Test of the impact of E-control motives on corporate performance of Jordanian commercial banks (N=99)

Dimension	Mean	SD	T Value	Degrees of freedom	Sig. (p-value)	Result
E-control motives	3.74	0.55	13.47	98	0.000	Accept

In order to examine the difference between the sample mean of e-control motives with a predefined population mean (3.0)<sup>1</sup>, one sample t-test was conducted. The 1-sample t-test compares the mean score found in an observed sample to a hypothetically assumed value. That is, testing a sample mean against a pre-defined theoretical assumed value (3.0). As shown in table (4), the sample mean is (3.74) which is greater than (3.0), and the significance p-value is below (0.05) at 95% confidence intervals, the obtained t-value is (13.47), degrees of freedom is (98), thus hypothesis 1 is accepted.

**Second hypothesis:** There is a significant statistical impact at the level ( $\alpha \leq 0.05$ ) of the Benefits of E-control on corporate performance of Jordan commercial banks.

This hypothesis is tested by calculating means and standard deviations of respondent's answers to all eleven questions of the benefits of e-control. One sample t-test is also being carried out to test the hypothesis. Table (5) shows the results.

<sup>1</sup> The hypothesized value of 5-Likert scale equals 3 as calculated in this equation:  $(1+2+3+4+5)/5=3$

Table 5: Means and Standard Deviations of e-control benefits at Jordanian commercial banks (N=99)

Rank	No.	Item	Mean	SD
8	1	Electronic tools help apply e-control mechanism.	3.60	0.95
3	2	E-control gives reliable feedback that helps configure causes of problems in order to restrict them in the future.	3.72	0.94
1	3	E-control helps management distinguish capable employees from lazy ones.	3.75	1.02
11	4	E-control helps take suitable actions in favor of neglected employees.	3.36	1.13
4	5	E-control encourages employees to develop their skills and attain new skills.	3.70	0.94
10	6	There is an impact of e-control systems on the bank's market share.	3.40	0.96
9	7	Top management relies heavily on e-control in taking strategic decisions.	3.48	0.99
5	8	E-control is capable of monitoring internal financial transactions accurately.	3.68	0.98
6	9	E-control reinforces corporate self-control.	3.66	0.88
7	10	E-control corrects deviations in the right time.	3.61	1.06
2	11	E-control limits manipulations of periodic reports results.	3.74	1.00
Benefits of E-control as a whole			3.61	0.61

As shown in Table (5), the item that says “E-control helps management distinguish capable employees from lazy ones” scored first (3.75). In the second rank, the item “E-control limits manipulations of periodic reports results (3.74). In the last rank, the item “E-control helps take suitable actions in favor of neglected employees” has a moderate mean value (3.36). The overall mean is (3.61).

Table 6: Means and Standard Deviations of T-Test of Benefits of the impact of E-control on corporate performance of Jordanian commercial banks (N=99)

Dimension	Mean	SD	T Value	Degrees of freedom	Sig. (p-value)	Result
Benefits of E-control	3.61	0.61	9.95	98	0.000	Accept

As shown in Table (6), the t-value is (9.95) and it is statistically significant (p-value is less than 0.05). Thus, the relevant hypothesis is accepted.

**Third Hypothesis:** There is a significant statistical impact at the level ( $\alpha \leq 0.05$ ) of the *Uses of E-control* on corporate performance of Jordan commercial banks.

This hypothesis is tested by calculating means and standard deviations of respondent's answers to all nine questions of the uses of e-control. One sample t-test is used to test the hypothesis. Table (7) shows the results.

Table 7: Means and Standard Deviations of Uses of E-control at Jordanian commercial banks (N=99)

Rank	No.	Item	Mean	SD
8	1	E-control motivates employees to do their best in offering bank services.	3.53	0.95
3	2	E-control helps achieve high levels of service accuracy.	3.65	0.96
2	3	E-control enhances participation in decision making and problem solving	3.70	1.01
6	4	E-control allows holding employees accountable of their work and authority.	3.61	1.00
1	5	Ongoing control challenges reflect banks willingness to enhance performance standards.	3.73	0.89
9	6	Banks management uses electronic operations and control templates when sending data.	3.48	0.79
4	7	E-control systems allow banks carry out annual performance comparisons.	3.64	0.94
5	8	E-control is capable of yielding quick internal process results.	3.62	0.94
7	9	Continuous updating of security systems is normal in our bank.	3.59	0.94
		Uses of E-control as a whole	3.61	0.60

As shown in Table (7), the item “Ongoing control challenges reflect banks willingness to enhance performance standards” scored first (3.73). While the item “E-control enhances participation in decision making and problem solving” scored second (3.70). In the last place, the item “Banks management uses electronic operations and control templates when sending data” scored (3.48) mean. The overall mean of the dimension is quite medium (3.61).

Table 8: Means and Standard Deviations of T-Test of the impact of Uses of E-control on corporate performance of Jordanian commercial banks (N=99)

Dimension	Mean	SD	T Value	Degrees of freedom	Sig.	Result
Uses of E-control	3.61	0.60	10.19	98	0.000	Accept

As shown in Table (8), the t-value is (10.19) and it is statistically significant (p-value is less than 0.05). Thus, the relevant hypothesis is accepted.

**Fourth Hypothesis:** There is a significant statistical impact at the level ( $\alpha \leq 0.05$ ) of ***E-control challenges and counter measures*** on corporate performance in Jordan commercial banks.

This hypothesis is tested by calculating means and standard deviations of respondent’s answers to all thirteen questions of the e-control challenges and counter measures. One sample t-test is used to test the hypothesis. Table (9) shows the results.

Table 9: Means and Standard Deviations of E-control challenges and counter measures at Jordanian commercial banks (N=99)

No.	Item	Mean	SD
1	E-control banking data backup is carried out on regular basis.	3.42	1.17
2	In case of power shortages, the bank provides redundant power supplies to guarantee continuity of operations.	3.71	0.91
3	Our bank uses different e-control systems such as thumb or eye recognition to monitor employee check ins and outs.	3.82	0.85
4	E-control reduces managerial costs compared to traditional control requirements (i.e. staff and accessories).	3.70	0.99
5	Lack of personnel and materials cause deteriorations of e-control application.	3.64	1.01
6	Lack of awareness of e-control objectives and styles is one obstacle of the control function.	3.72	1.07
7	Individual conflicts and self-interests may cause malfunction of the bank control system.	3.57	0.95
8	Bank managers fully understand the nature of e-control systems.	3.75	0.91
9	Mutual Agreement of bank managers regarding e-control objectives has been achieved.	3.74	0.90
10	Bank overall performance has enhanced compared to last year indicators.	3.71	0.97
11	The bank market share has improved compared to last year indicators.	3.93	0.92
12	Profit objectives have been achieved.	4.00	0.88
13	Return on investment is satisfactory in our bank.	3.87	0.99
E-control challenges and counter measures as a whole		3.74	0.60

As shown in Table (10), the t-value is (12.21) and it is statistically significant (p-value is less than 0.05). Thus, the relevant hypothesis is accepted.

Table 10: Means and Standard Deviations of T-Test of the impact of E-control challenges and counter measures on corporate performance of Jordanian commercial banks (N=99)

Dimension	Mean	SD	T Value	Degrees of freedom	Sig.	Result
E-control challenges and counter measures	3.74	0.60	12.21	98	0.000	Accept

## Summary of the Results

The results of the study are summarized in the following section:

1. There is a significant statistical impact of e-control motives on corporate performance in Jordanian commercial banks.
2. There is a significant statistical impact of e-control benefits on corporate performance in Jordanian commercial banks.
3. There is a significant statistical impact of e-control uses on corporate performance in Jordanian commercial banks.
4. Several challenges and problems may face banks in the application process of e-control systems.

## RECOMMENDATIONS

Based on the study findings, the following recommendations are suggested:

- To take care of e-control systems to cope up with the growing nature of banking operations.
- To enhance the use of e-control systems as a tool of monitoring employees in the workplace.
- To do further relevant studies on a wider scale (bigger sample size, and cover more banks in the kingdom of Jordan).
- Jordanian commercial banks should be able to accept the level of risk that they can cope up with in electronic banking system, measurable to the bank's overall strategic and business plans.
- Provide adequate security both physically and electronically to check the incidence of hacking by fraudsters.
- Banks management should from time to time train customers with regard to electronic banking, its benefits, risk exposure, physical and electronic security to avoid financial loss in the hands of hackers.
- Banks should shower more investment in the provision of the POS electronic payment channels, as this will heighten their profit and performance in the short to medium term.
- Jordan commercial banks should also partner with retail outlets like supermarkets and other service providers to increase the use of banking services at point of sale terminals.

## SCOPE FOR FURTHER STUDIES

Authors suggest that future studies may include noncommercial banks as well. Interviews with high ranking bank officials and key informants may also add value to the data collection methodology process. Future research could extend the analysis to include issues of interest to policy makers and regulators. Qualitative analysis of the relationship between e banking and corporate performance of banks may as well be suggested for future studies.

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**APPENDIX (1)****Questionnaire**

No.	Item	Strongly agree	Agree	Neutral	Dis- agree	Strongly Disagree
1- Motives of using Electronic Control						
1	E-control helps improve work and enhances awareness of performance gaps.					
2	E-control helps enhance bank performance.					
3	The use of e-control limits risks that employees may encounter.					
4	E-control positively supports the proper selection of employees so as to have the right person in the right position.					
5	E-control enhances the seriousness of work.					
6	E-control enhances corporate confidence in the bank's incentives scheme.					
7	E-control enables employees refer to historical data.					
8	Flexibility of e-control permits professionals detect gaps in the bank service processes.					
9	E-control saves managers' and supervisors' times and efforts.					
10	E-control is regarded more efficient than traditional control.					
11	The use of e-control (i.e. code- readers) enhances bank's performance.					
2- Benefits of E-control						
12	Electronic tools help apply e-control mechanism.					
13	E-control gives reliable feedback that helps configure causes of problems in order to restrict them in the future.					
14	E-control helps management distinguish					



	capable employees from lazy ones.
15	E-control helps take suitable actions in favor of neglected employees.
16	E-control encourages employees to develop their skills and attain new skills.
17	There is an impact of e-control systems on the bank's market share.
18	Top management relies heavily on e-control in taking strategic decisions.
19	E-control is capable of monitoring internal financial transactions accurately.
20	E-control reinforces corporate self-control.
21	E-control corrects deviations in the right time.
22	E-control limits manipulations of periodic reports results.
3- Uses of E-control	
23	E-control motivates employees to do their best in offering bank services.
24	E-control helps achieve high levels of service accuracy.
25	E-control enhances participation in decision making and problem solving
26	E-control allows holding employees accountable of their work and authority.
27	Ongoing control challenges reflect banks willingness to enhance performance standards.
28	Banks management uses electronic operations and control templates when sending data.
29	E-control systems allow banks carry out annual performance comparisons.
30	E-control is capable of yielding quick internal process results.
31	Continuous updating of security systems is normal in our bank.

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#### 4- E-control challenges and counter measures

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32 E-control banking data backup is carried out on regular basis.

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33 In case of power shortages, the bank provides redundant power supplies to guarantee continuity of operations.

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34 Our bank uses different e-control systems such as thumb or eye recognition to monitor employee check ins and outs.

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35 E-control reduces managerial costs compared to traditional control requirements (i.e. staff and accessories).

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36 Lack of personnel and materials cause deteriorations of e-control application.

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37 Lack of awareness of e-control objectives and styles is one obstacle of the control function.

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38 Individual conflicts and self-interests may cause malfunction of the bank control system.

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39 Bank managers fully understand the nature of e-control systems.

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40 Mutual Agreement of bank managers regarding e-control objectives has been achieved.

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41 Bank overall performance has enhanced compared to last year indicators.

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42 The bank market share has improved compared to last year indicators.

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43 Profit objectives have been achieved.

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44 Return on investment is satisfactory in our bank.

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