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Internal Control System: Analyzing Theoretical Perspective and Practices

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Abstract: This paper aims to present the theoretical perspective and practices through relevant literature review on internal control system (ICS). Authors used the systematic research on academic and non-academic literature. 3 legislations, 20 working papers of professional bodies, 30 research articles and 10 books were consulted to review the ICS. It is found that a properly developed and effectively implemented internal control system helps to protect against wastage of resources and a basis for the smooth operations of all types of organizations. It produces reliable financial reports which are helpful to the stakeholders to make their best decision. This paper finds the importance that internal control system helps the organizations reduce their operational risk and improve the reliability of financial reporting to build confidence of shareholders.

Key words: Internal control system · Corporate governance · Financial reporting · Regulations · Control culture

INTRODUCTION

Background: ISO/IEC 27001 [1] has realized that it is essential to have information security which is required by the businesses to safeguard its economic resources. IEC 27001 explains that information security issues must be consistently addressed. Information security depends upon 3 things; 1) technology, 2) processes and 3) the people [2]. Therefore, a systematic control is required to provide security of such information which is important for all types of organizations either service oriented or manufacturing. Furthermore, it is no longer only the purpose of protecting confidentiality and integrity but it must deliver the real benefits to the business both protecting the information as well as managing the associated risk in a dynamic threatening environment [2].

Need for Control System: Globalization has made the organizations to expand their businesses beyond the border of countries which has made difficult for the few people to control the wastage of resources. So, with the expansion of businesses, there has been a necessity for separate controls mechanism to regulate the activities of business operations to protect the interest of shareholders. Control is ensuring that the organization operates in its intended manner and achieves its goals [3]. All type of organizations face different challenges in which the most important challenge is configuring the resources in a way that provides maximum value to the shareholders of the organization [4]. New code of conducts, regulations, standards and controls that exist in every country to control the business operations must be complied by the organizations. Most of the new laws are the outcome of different frauds and scandals in different countries. For instance, Salad Oil company, Equity funding, Polly Peck, Maxwell Pensions, Enron, WorldCom are giant names which not only affected the stakeholders but also shaken the economy of the country. These scandals and frauds ultimately forced to the regulators and policy makers to bring new regulations and laws. Although small frauds are still exist but they do not affect at large.

Types of Controls: According to GAMMA [5], control can be characterized into the three types; 1) Preventive control, 2) Detective Control and 3) Reactive Control. Following is the Table 1 that shows the sub categories:

Internal Control System: Management of information security is not only "locks and keys" but it must relate to the social alliance and behavior of the people [6].

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Table 1:

Classes	Ability to detect the event and take recovery action
Preventive Control	Prevents or detect the event and its impact from happening
Detective Control	This can be further categories into three components
	a). It detects the event and then reacts to solve within a very short period of time
	b). It detects the event and promptly reacts to solve within a very short period of time
	c). It detects the event but it takes time to react and solve the problem
Reactive Control	Reactive control has also three sub components
	a). It cannot detect and promptly react on the events but it has partially set up Business Continuity Planning (BCP)
	b). It is unable to detect the event from happening but it does have BCP to solve the problem.
	c). It is unable to detect the event and the organization does not have BCP.

According to State Bank of Pakistan [7], financial experts from all over the world have learnt that the incidents of bank crisis are due to the failure of internal control system. Small number of researchers has also suggested that there is a need to better understand the social aspects of the organization [2]. Attention to internal controls has significantly increased because of regulatory and competitive forces since 1990s [8]. Internal control issues are very important to assure the accuracy, timeliness and reliability of the financial reports to the organizations [9]. So, control can be referred as internal check, internal control and internal audit but the objective of all is to get work done efficiently and effectively without the wastage of economic resources of company. The internal control system is a way in which the management utilizes the organization's resources to achieve its objectives [10]. Almost all organizations have an internal control system with the different names or designs. Large organizations have formal department where as small have informal in which manager performs the similar duties. Internal Control has become an important debatable topic in all the organizations due to latest financial crises which spread all over the world [11]. Due to its practical nature the implication of internal control system is inconsistent.

Internal control system is an obligatory requirement which helps the management to meet the obligations of corporate governance and other legislation. It requires the directors and senior management to maintain an effective control over the resources and procedure of work within the organization. An affective process of internal control system gives the management with all the possibilities to prevent, detect and react against all the associated risks either from human behavior or business operations. Regulatory and competitive forces have brought attention to maintain internal control system [12]. Mainly, internal control system can be maintained in two basic parts: 1) Procedures required to conduct the business called *operational procedures*, 2) Procedure which makes sure that the business is doing according to the expectations called *controls*.

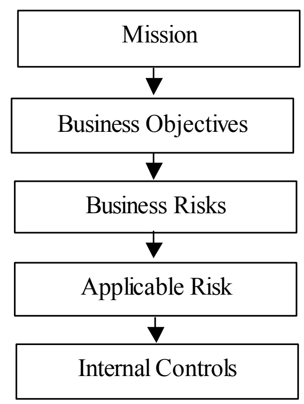

Fig. 1:

In September 2001 Gamma has provided the guidelines of the Audit Practices Boards which includes the following steps 1) Write down your mission of business, 2) Identify business objectives which are needed to accomplish that mission, 3) Identify your risks associated with business objectives, 4) Identify the categories of risks (applicable) and finally, 5) Establish the Internal Control System. Following figure 1 is the hierarchy of five steps mentioned by Gamma in which last step comes to internal control [13].

Objectives of Internal Control System: In general, internal control system is used to decrease loss of revenue, wastage of resource, unanticipated costs. When one employee executes both functions of physical control over assets and records, there is potential risk of misusing the assets of the company for personal gains and adjusting the records to relieve from responsibilities. Common objectives of internal control include a) reliability of financial reporting, b) effectiveness and efficiency of operations and c) compliance with applicable laws and regulation [14]. Establishment and supervision of internal control systems are the responsibility of management to get the expected results [15, 16]. It is essential to have an adequate internal control system to protect assets and records which can be done by separations of duties. If the assets and records are not properly protected then they can be either stolen or damaged or misused for personal purposes. Such events could cause interruption of accounting as well as working process of the organizations. The protective measure for protection of assets and information is the use of segregations of duties for physical safety against pilferage. Firms in the highest category of internal control experience significantly improve quality of earnings [17]. According to State Bank of Pakistan (2004), 0bjectives of internal control can be categorized into; *a)* performance objectives, *b)* information objectives and *c)* compliance objectives. The performance objectives should focus on protection of assets, efficiency in the operation and risk management. The information objective requires accuracy of records and adequacy of disclosure. Compliance objective requires ensuring that laws, regulations and internal polices relevant to the organization are properly implemented.

So, internal control is basically directing people's actions in the best interest of the organizations. To identify a proper control, an organization must know its associated risks that create hindrance against the achievement of its objectives. Any organization either profit making or non-profit making define its objectives than observe its associated risks and finally implement control to get the desired results.

MATERIAL AND METHODS

Search Criteria: Search of relevant material was made in two phases from different search engines; 1) work done by the different professional bodies and 2) work done by researchers on Internal Control System. Multiple search engines were used for open access of material. In first phase, searching was made through title, keywords and abstract. In the second phase, a skim reading was made to check the relevancy and irrelevancy of downloaded material. After the elimination of irrelevant material, a final phase was done in which we gone through all the working papers, organizations practices, books and research articles. A total of 200 Articles, working papers, books, Legislations and websites were accessed. After refinement and final review, 3 legislations, 20 working papers of professional bodies, 30 research articles and 10 books were selected. Deductions were made from these Codes and Legislations about internal control system. Following is the table 2 that shows four different regulations;

Table 2:

No.	Regulations
1	*Sarbanes-Oxley Act 2002 (SOX)*
2	*Swedish Code of Corporate Governance*
3	*The UK Code of Corporate governance*

Internal Control and Legislations

Sarbanes-Oxley Act 2002 (SOX): Series of business failures and corporate scandals in USA caught the attention of business world which required a comprehensive legislation that could satisfy the interest of stakeholders who are not involved in the operations of business.

Sarbanes-Oxley Act 2002 [18] was the result of high profile failures of businesses and corporate scandals in USA to reinforce the responsibility of directors and other major authorities of companies with regard to control the resources. Section 404 of Sarbanes-Oxley Act fulfills one of the requirements of corporate Governance in Sarbanes-Oxley Act which deals with the internal control.

Turnbull Guidance has been identified by The US Securities and Exchange Commission (SEC) as an appropriate framework for complying with the requirements of US for internal controls over financial reporting. SEC 404 of SOX Act 2002 describes that company's annual report must contain the report of internal control report which includes The management responsibility statement for establishing and maintaining internal control system for the financial reporting of the firms, identifying framework used by the management to evaluate the efficiency and effectiveness of internal control assessed by the management in financial reporting at the end of recent fiscal year. Moreover this report must also mention *"any material weaknesses"* if any found in control system.

The problem with Sec 404 of SOX is that it has increased the costs of organizations due to the involvement of different parties. For instance, Sec 404 says that *"it should include the senior management, in-house counsel, internal auditors, outside councel and audit committee members"*. According to this section, it implies 35-40% of the total audit fees of a company. Increased need for surveillance in business may represent the fact that the cost of monitoring transactions will also rise [19].

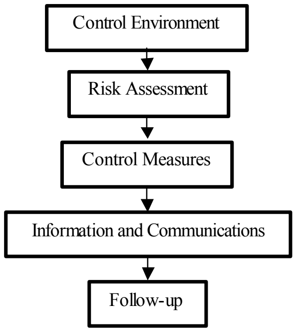

Fig. 2:

Swedish Code of Corporate Governance: The Swedish Companies Act 2005 forms the basis of Swedish Corporate Governance [20]. All the firms working in Sweden have to comply with 'The Swedish Code of Corporate Governance' (The Code) according to the listing requirements of OMX Nordic. The Code is based on self-regulation within Swedish industry with the principle of "comply or explain". If a firm is unable to comply with the individual rules then it must justify the reason for deviation or non-compliance. The Code specifies that the Board must include in an annual report about the establishment of internal control with regard to financial reporting. The Code stipulates five basic steps of hierarchy to smooth the operations and procedures of firm to protect the interest of shareholders which are given below

The Code stipulates that the board must establish a *Control environment.* Swedish Code of Corporate Governance provides the details of divisional responsibilities, formation of policies regarding operations and guidelines for board members, president and other top management. Employees should be communicated the details of these control documents through established information and communication channels. *Risk assessment* explains that the firm should identify, analyzes and take decisions on risks that arise in financial reporting. The outcomes of the risk must be properly dealt in order to ensure that all the important areas are identified and necessary actions have been taken. *Control measures* provide that the firm should take precautionary measures to avoid errors and losses in financial reporting and to ensure that necessary actions are taken. Firm's information policies should be communicated internally as well as externally for the information and communication channels. For this purpose, management should arrange regular meetings. Lastly, firms should assess the internal control system continuously regarding financial reporting. The board will receive quarterly reports of financial results with the comments of management operations. Board will also take the decisions on significant risk areas associated with the operations of business and evaluate the internal control system of the firm on an annual basis.

The UK Corporate Governance Code: In June 2010, Financial Reporting Council (FRC) has issued "The UK Corporate Governance Code" to regulate the working of companies in UK [21]. It consists of principles and provisions that require companies working in UK to apply and report to shareholders that how the business operations have been done by the management. The Turnbull guidance published by FRC has been taken as a guide for applying this Code which was originally published in 1999. The Turnbull guidance basically sets the best practices regarding the internal control for listed companies in UK. It assists companies in applying section C.2 of Code which asserts that a sound internal control system should be established and maintained by the board to protect the assets of company and ultimately shareholders' investment. In July 2004, FRC set up a committee presided by Douglas Flint (Group Finance Director, HSBC Holdings plc.) to review and update the guidance for implementing and its developments in the UK and internationally.

This Code helps the boards to discharge their duties in the best interests of their companies. Like Swedish Code, this code also gives flexibility to the parties in ''comply or explain'' approach. If the companies have followed an alternative provision then the justification is required to satisfy the shareholders that work has been done efficiently by other means. The Code explains the responsibilities of board and their willingness in determining the nature, extent of major risks associated with the operations of the management and the achievement of its strategic objectives. It also asserts to the board to establish the formal and transparent arrangements for applying internal control principles.

The Code explains that the board must conduct at least annually a review of financial, operational and compliance controls and their effectiveness to report the shareholders of the company. "FSA Rule DTR 7.2.5 R requires companies to explain the main features of the internal control and risk management systems in relation to the financial reporting process". Disclosure and Transparency Rules 7.1.3 R of FRC states that the relevant body must *"Monitor the financial reporting process, monitor the effectiveness of the issuer's internal control, internal audit and risk management systems".*

Table 3: Definitions of the terms

Terms	Definitions
Effectiveness	*"This is a measure of the match between stated goals and their achievement".* [22]
Efficiency	*"Efficiency refers to a comparison of inputs and their related outputs".* [23]
Control	*"Ensuring that the organization operates in the intended manner and achieves its goals".* [24]
Process	*"A set of Linked activities".* [24]
Reliability	*"Ability of a measurement to differentiate between subjects or objects".*[25]
Compliance	*"Conformity with regulatory requirements established by government".*[26]
Management	*"The process of achieving organizational goals by engaging in the four major functions of planning, organizing, leading and controlling".*[27]
Objectives	*"Statement more precisely then mission statement what is to be achieved and when results are to be accomplished".* [28]
Planning	*"Developing a detailed Financial and operational description of anticipated operations".* [24]
Risk	*"A measure of the variability of return on investment".*[27]

Table 4: Definitions of Internal Control System

No.	Bodies	Definitions
1	COSO (2009)	*"An internal control is a process, affected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in (1) effectiveness and efficiency of operations (2) Reliability of financial reporting and (3) compliance with applicable laws and regulations".*[16]
2	Price water coopers	*"An internal control system consists of all the procedures, methods and measures (control measures) instituted by the Board of* (PwC) (2008) *Directors and executive management to ensure that operational activities progress in a proper fashion. Organizational measures for internal control are integrated into operations, which means that they are performed simultaneously with working processes or performed directly before or after work is carried out".*[29]
3	Standards for Internal Control in New York State Government (2007)	*"Internal control is the integration of the activities, plans, attitudes, policies and efforts of the people of an organization working together to provide reasonable assurance that the organization will achieve its objectives and mission".*[30]
4	AMF working group (2007)	*"Internal control is a company's system, defined and implemented under its responsibility which comprises a set of resources, patterns of conduct, procedures and actions adapted to the individual characteristics of each company which contributes to the control over its activities, to the efficiency of its operations and to the efficient utilization of its resources enables it to take into consideration, in an appropriate manner, all major risks, be they operational, financial or compliance".* [31]
5	PIFC Expert Group Internal Control Systems in Candidate countries (2004)	*"The system of internal control is that which is developed to properly control the financial and operational procedures of any entity. Internal control can provide reasonable but not absolute assurance that assets are safeguarded and that transactions are authorized and properly recorded in a way that allows for the timely identification and correction of material errors. Internal control is based upon a system of management information, financial regulations, administrative procedures and a system of accountability as well as strong formal project management".*[32]
6	The International Organization of Supreme Audit Institutions (INTOSAI, 2004)	*"Internal control is an integral process that is effected by an entity's management and personnel and is designed to address risks and to provide reasonable assurance that in pursuit of the entity's mission, the following general objectives are being achieved: executing orderly, ethical, economical, efficient and effective operations, fulfilling accountability obligations, complying with applicable laws and regulations and safeguarding resources against loss, misuse and damage".*[33]
7	Federal Government, United States General Accounting Office	*"An integral component of an organization's management that provides reasonable assurance that the following objectives are being achieved: effectiveness and efficiency of operations, reliability of financial reporting and Compliance with applicable laws and regulations".*[34]
8	French Institute of Chartered Accountants (1999)	*"Internal control is the set of security measures which contribute to the control of a company. Its aim is to ensure, on the one hand, the security and safeguard of assets and the quality of information, on the other hand, the application of instructions given by Senior Management and to encourage improvements in performance. It is evidenced through the organization, methods and procedures for each of the company's activities, so as to ensure the continuity of that company".*[31]
9	American institute of Certified Public Accountants (1963, 1949)	*"Internal control comprises the plan of organization and all of the co-ordinate methods and measures adopted within a business to safeguard its assets, check accuracy and reliability of its accounting data, promotes operational efficiency and encourage adherence to prescribed managerial policies".*[35]
10	Basle Committee on Banking Supervision (1998)	*"Internal Control is a process affected by the board of directors, senior management and all levels of personal. It is not solely a procedure or policy that is performed at a certain point in time, but rather it is continually operating at all levels within the bank."*[36]

DTR 7.2.10 R states that an issuer which is required to prepare a group directors' report within the meaning of Section 415(2) of the Companies Act 2006 must include a report stating the *"main features of the internal control and risk management systems in relation to the process for preparing consolidated accounts of the companies"*.

Definitions of the Terms: To understand the definitions provided by the different authors and professional bodies, we have defined the terms which are being used in the internal control definitions.

Now, we report different definitions presented by different professional bodies. Brief introduction of these bodies are given in appendix 1. These definitions not only provide time to time needs of any organizations but also provide update for new component required by the management.

Discussion on the Definitions: There is a common consensus by all the researchers and professional bodies on 3 components from the definitions;

- Efficiently and effectively control of financial and operational "activities or operations"
- Reliability of financial reporting,
- Application of policies, regulations and laws lay down by the management

Operations are prescribed series of co-ordinated steps to be taken by the management under certain recurring circumstances [27]. Operations are coordinated methods and measures adopted by the organizations within the business to safeguard its resources [37]. Operations are combination of different activities, strategies, policies and efforts of the people working together in an organization [30]. AMF working Group [31] explains that operations which consist of resources, procedures, conducts and actions relevant to that specific company. These control activities consists of company's internal processes which observe and control the functions correctly, particularly the safety of its assets. PIFC Expert Group [32] explains the operations are the process of transactions. So, the operations or procedures are the combinations of management information system, administrative procedures system and a system of accountability which helps the management to work according to the strategic objectives. Reliability is consistency of a measure which identifies the accuracy and quality of accounting information presented to show true and fair view [38]. Reliability is the ability of a measurement to differentiate between subjects or objects [25]. Micro Strategy, Waste Management, Qwest, Tyco, Adelphia, Fannie Mae, Global Crossing, HealthSouth, Xerox and others are the common examples which traumatized the confidence of investors over the financial information provided by the companies. These scandals increased the gap between the investors' expectations of corporate governance and financial reporting. Several measures have been taken by regulators to close this gap. Unreliable financial reports are mainly considered the reasons for the loss of investor's confidence and the stock market crash that results high profile scandals [39]. One of the most important tasks of internal control is to ensure the quality of financial reporting [17]. One of the purposes of the Sarbanes-Oxley Act was to re-establish the confidence of the investors in financial reporting by providing financial results that reflect the true economic performance of the firms [40]. Identify that internal control regulations limit managerial discretion and improve the quality of financial reports [41]. US firms use the world wide code whatever the cost companies have to bear just to enhance their credibility in the markets [42]. PCAOB [43] cites that there is need for professional bodies and public companies to restore the confidence of investors in financial markets by increasing level of data accuracy, reliability and fairness in financial statements. *Compliance* is the state or fact accordingly with or meeting rules or standards. Compliance can be defined conformity with regulatory requirements established by government [44]. A suitable governance laws can help alleviate challenges of process, quality, cost and overall profitability risk associated with them [45]. Different organization either profit making or no-profit making have some set standards, rules, regulations which must be complied so that the organizations processes could be done in an intended manner to avoid the wastage of resources. These rules, regulations, policies may vary from organization to organizations, industry to industry and even country to country. Without compliance, there is no rule of law, no matter how well the Institutions and regulations are designed [46]. Compliance is ensuring that the requirements of laws, regulations, industry codes and organizational standards and policies are met [47]. According to German Corporate Governance Code firms that paid higher average remunerations to their management board members were less likely to comply, whereas firms with higher Tobin's Q were more likely to comply [48].

Internal Control System Definition Concluded by the Authors: Keeping in mind the above components, internal control system can be concluded:

> *"It is a process which is designed specific to the organization that provides a reasonable assurance for achieving the objectives of an organization affected by an entity's stakeholders including board of directors, top-middle management and other personnel who are responsible to develop internal control culture to maintain the effectiveness and efficiency of operations and complying the applicable laws and regulations that results minimizing the misuse or wastage of resources and presenting reliable financial report which shows true and fair picture of the company's financial position to the stakeholders and help them to make their best investment decisions".*

Figure 2 above shows that the organizations should design operations or procedures which help coordinated efforts of the people working together in an organization in which work done by one employee is routinely checked by another employee during normal course of operations. The outcomes would be minimum wastage or misuse of resources and improve the confidence of shareholders on the financial reporting that will help them to make their best investment decisions.

Summary: Human behavior cannot be predicted but internal control systems are mechanisms, policies and procedures used to reduce and monitor operational risk and smooth working in the best interest of the shareholders. Internal control systems should be designed in such a way that provides assurance to the shareholders for the effectiveness and efficiency of operations, reliability of financial information and compliance with the laws and regulations. It should be treated as a continuous process, so that any flaw can be prevented when found. Effectiveness of the internal control can be achieved through ongoing monitoring at each level of out. Furthermore, monitoring of the major risks should be the part of the daily activities of the all organizations along with the periodic evaluations. In conclusion, top management must provide a control culture, regularly assessing the associated risks, requiring the implementation of effective and efficient control activities with segregation of duties of its employees, reliable information at all level to align with the short and long term objectives of the organizations.

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APPENDIX 1: Organizations with their brief descriptions working on Internal Control System

No.	Organization	Description
1	COSO	Committee of Sponsoring Organization of the Treadway Commission is sponsored by five major American professional organizations which is a private sector initiative begun in 1985 to address fundamental causes of financial reporting scandals.
2	International Organization of Supreme Audit Institutions (INTOSAI)	INTOSAI was formed in 1953 at the initiative of Emilio Fernandez Camus with presently 189 full members and 4 associated members. It is a non-governmental, autonomous, independent and non-political organization with special consultative status with the Economic and Social Council (ECOSOC) of the United Nations and operates as an umbrella organization for the external government audit community.
3	AMF	The Autorité des marchés financiers (AMF) established by the Financial Security Act of 1 August 2003. It was formed from the merger of the Commission des opérations de bourse (COB), the Conseil des marchés financiers (CMF) and the Conseil de discipline de la gestion financière (CDGF). The objective in amalgamating these bodies was to improve the efficiency of France's financial regulatory system and to give it greater visibility. The AMF is an independent public body of France with legal personality and financial autonomy.
4	Standards for Internal Control in New York State Government	The New York State Governmental Accountability, Audit and Internal Control Act of 1987 (Internal Control Act) required State agencies and other organizations to promote and practice good internal control and to provide accountability for their activities. In 1999, this legislation was made permanent and the State Finance Law was amended to require the State comptroller to issue internal control standards for State agencies and other organizations.
5	Price waterhouse Coopers (PwC)	PricewaterhouseCoopers is one of the world's pre-eminent professional services organizations which works as a professional advisers to helps its clients solve complex business problems and aim to enhance their ability to build value, manage risk and improve performance.
6	Public internal financial control (PIFC) Expert Group	The concept of PI*f*C was developed by the European Commission during the second half of the 1990's and is nowadays used to guide and support applicant countries attempting to develop modern public internal control systems.
7	GAMMA	Gamma is an ISO/IEC 27001:2005 and BS EN ISO 9001: 2008 registered company, certified for the provision of information security consultancy. Gamma is a subscribing member of the British Standards Institution and an active participant in its committees relevant to information security.
8	The Basle Committee on Banking Supervision	The Basle Committee on Banking Supervision is a Committee of banking supervisory authorities located Basle established by the central bank Governors of the Group of Ten countries in 1975 which consists of senior representatives of bank supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, Netherlands, Sweden, Switzerland, United Kingdom and the United States.