

A NEW BUSINESS CONTROLS FRAMEWORK FOR THE 21ST CENTURY

By John Kyriazoglou (jkyriazoglou@hotmail.com)
John Kyriazoglou, CICA, B.A (Hon-University of Toronto),
International IT and Management Consultant,
Editor-in-Chief for the Internal Controls Magazine

‘Apply yourself both now and in the next life. Without effort, you cannot be prosperous. Although the land may be good, you cannot have an abundant crop without cultivation.’

Plato, Ancient Greek Philosopher (427-347 BC)

Abstract: This paper describes the role of controls and proposes a business management controls framework which enables, facilitates and supports you in designing and implementing effective controls to operate all your business functions and control systems. Also two controls (Business Management Controls Framework and Business Management Controls System Manual) are detailed and a recommendation (Recommendation 1: Create and implement a Controls Framework to satisfy your needs) is offered for your consideration.

1. Introduction

‘The companies that survive longest are the ones that work out what they uniquely can give to the world not just growth or money but their excellence, their respect for others, or their ability to make people happy. Some call those things a soul.’ is a famous quote by management guru Charles Handy. But how are all these to achieved by organizations in the most optimal way?

Controls, managers, internal control frameworks, business management controls, and performance and compliance measures are the most crucial components toward reaching these goals and making companies most beneficial to all. These are noted next.

2. The role of control in management activities

Business management controls, in general, and governance, strategic and operational controls, in particular, facilitate the process of defining strategic and operational goals and monitoring the measurement and reward aspects of performance and compliance of private corporations and public organizations.

This process of business management control ensures:

1. Effective and efficient operation of the organization
2. Effective implementation of strategy
3. Practical measurement and comparison of actual vs. expected results in relation to predefined strategic and operational targets, risks identified and assessed, and

4. Fit-to-purpose solutions by analyzing issues and problems, implementing specific solutions and carrying out corrective and improvement actions for the achievement of expected business performance and corporate compliance requirements.

Control is one of the managerial functions like planning, organizing, staffing and directing. It is an important function because it helps to check the errors and to take the corrective action so that deviation from standards are minimized and stated goals of the organization are achieved in desired manner. According to modern concepts, control is a foreseeing action whereas earlier concept of control was used only when errors were detected. **Control** means "to check, verify, regulate"¹. Control in management means setting standards, measuring actual performance and taking corrective action.

Business management control in a corporate environment can be defined as a systematic effort by business management to compare performance to predetermined standards, plans, or objectives in order to determine whether performance is in line with these standards and presumably in order to take any remedial action required to see that human and other corporate resources are being used in the most effective and efficient way possible in achieving business goals and specific corporate objectives. Planning is a process by which an organization's objectives and the methods to achieve the objectives are established, and controlling is a process which measures and directs the actual performance against the planned objectives of the organization. Planning and control are instituted via business management controls.

Business management controls are implemented by managers and control activities, while serving the purposes of primary, support and external parties' activities of business entities (organizations) of the private sector².

The word **manager** comes from 'manage', which means "to handle" (from Latin *manus* "hand", from Greek *mane* "hand"). In today's tough, dynamic, resource-tight and uncertain economy, a company (or organization) needs strong managers to lead its staff toward accomplishing business goals. But managers are not only leaders. They are problem solvers, coordinators, communicators, cheerleaders, and planners as well. And managers don't come in one-size-fits-all shapes or forms. Managers fulfill many roles and have many different responsibilities at each level of management within an organization.

Organizations abound in today's society. Groups of individuals constantly join forces to accomplish common goals. Sometimes the goals of these organizations are for profit, such as franchise restaurant chains or clothing retailers. Other times, the goals are more altruistic, such as nonprofit churches or public schools.

But no matter what their aims, all these organizations share two things in common: They're made up of people, and certain individuals are in charge of these people. These are the managers.

Managers appear in every organization because organizations want to succeed. These individuals have the sometimes unenviable task of making decisions, solving difficult problems, setting goals, planning strategies, and rallying individuals. And those are just a few of their

responsibilities.

To be exact, managers manage themselves, administer and coordinate resources effectively and efficiently to achieve the goals of an organization, manage context, manage relationships, and manage change. In essence, managers get the job done effectively, especially if they manage both themselves and other people very well.

No matter what type of organization they work in, managers are generally responsible for the performance of a group of people. Contrary to what some management gurus³ are claiming (i.e. that managers only administer while leaders envision, etc.), practice has shown that effective managers are also good leaders. Thus, as leaders, managers create, inspire, motivate and encourage their people to reach common organizational goals (at the general level), such as bringing a new product to market in a timely fashion, and also reach specific objectives, such as improve profits by a certain percentage, by the end of a given time period.

To accomplish these general goals and specific objectives, in an organizational setting of efficient provision of products and services to the world, managers (1) use their human resources, inputs, methods, and systems, to create outputs which can be translated into products and services for customers, and (2) a **control system, control activities, specific business management controls (governance, risk, compliance, strategic, operational) and a Business Management Controls Framework**, as noted next.

Choosing a business management control system to match the strategy, operations, culture, expectations and structure of an organization offers board and management a number of important challenges. Board and management must select business management controls that provide a framework to monitor, measure, and evaluate accurately whether or not it has achieved its business goals and strategic objectives. The usual financial, sales, and production (output) controls must be backed up with behavior controls (or soft controls) and organizational culture to ensure that the organization is achieving its goals in the most efficient and effective way possible. In general, these controls should reinforce one another, and care must be taken to ensure that they do not result in unforeseen consequences, such as competition among functions, divisions, projects, and individuals. Many senior managers point to the difficulty of changing organizational culture when they talk about reengineering their organization so that it can pursue new strategic goals. This difficulty arises because culture is the product of the complex interaction of many factors, such as top management, organizational structure, and the organization's reward and incentive systems⁴.

3. Types and Role of Business Management Controls in Supporting Business Activities

Business management controls are implemented by control activities, which are actions established by policies, procedures, practices and other automated or manual means, methods, algorithms and systems. The usual **types of controls** are: Directive controls, Preventive controls, Detective controls, Corrective controls and Compensating controls, as described next.

Directive controls. The purpose of directive controls is (a) to inform all participants in the activities of the organization how the specific business entity will function in various governance issues and (b) to instruct (direct) company resources and stakeholders about how to handle a variety of governance and management issues of the organization. These controls mainly relate to formulating guidelines, declarative statements for company vision, mission, values, etc., as well as corporate policies and procedures in all business functions (governance, risk, production, finance, IT, etc.). These are crafted and installed by top management to enable, promote and facilitate ethical behavior, social accountability, effective and efficient corporate performance and compliance with internal and external regulations.

Preventive controls. Preventive controls attempt to deter or prevent undesirable events and acts from occurring. They are proactive controls that help to prevent a loss, errors or omission. Examples of preventive controls are: tone at the top and other human factors, defined as ‘soft controls’ (understanding of the organization by the board, culture, structure of reporting relationships, morale, integrity and ethical values, operational philosophy, trust, ethical climate, empowerment, corporate attitudes, competences, leadership, employee motivation, expectations, openness and shared values, information flow throughout the organization, and emotional contracting), executing corporate procedures (formulating them is considered a directive control), customer and vendor credit checks, job descriptions, data entry checks, personnel hiring controls, segregation of duties, proper authorization schemes, adequate documentation, firewalls, security guards, anti-virus software, IPS system, training on security and other management issues, and physical security controls over company assets, like cash, ownership records, backup computer data files, contracts, patents, business records, works of art, etc.

Detective controls. The purpose of detective controls is to search for and identify errors and uncover problems after they have occurred and to detect undesirable acts. Examples of detective controls are: random checks of compliance, spot-checking of customer account and business transactions, bank account reconciliations, observations of payroll distribution, budget and project variance analyses, periodic physical inventory counts, computer passwords, transaction edits, system monitoring, IDS, IPS, anti-virus, regular supervisory review of activities, and reports, and audits (internal and external).

Corrective controls. Corrective controls are designed to prevent the recurrence of errors. Examples of corrective controls are: coaching, counseling and providing training to staff, backing up and recovering data and systems, correcting data in systems, using quality inspection techniques, taking disciplinary actions, upgrading operating and application software, posting reversing journal entries in accounting systems, correcting procedures, etc.

Compensating controls: Compensating controls are internal controls that are intended to reduce the risk of an existing or potential control weakness. Examples of compensating controls are: investigating exceptions, errors, shut-downs, irregularities and discrepancies, reviewing a random or critical sample of transactions, reviewing actions, reports, etc., of all transactions executed by the employee who can perform all key activities of a business transaction, comparing cash, and other assets to accounting records and other company-maintained data, reviewing all registers, logs, audit trails, and security incidents, etc.

Business managers must choose the right mix of all these control activities (detective, preventive, etc.) and implement them to suit their corporate environment. But in order to do this, they must analyze their business activities and decide what role the control activities should play in their unique and specific business operational framework.

Business Management is defined as ‘The activities associated with running a company, such as controlling, leading, monitoring, organizing, and planning’ according to Business Dictionary⁵

Business management is what business managers do. Business managers enable and support their organizations in reaching their targets, make more money and become more beneficial. Businesses make money by delivering some value to their customers that the latter are willing to pay for, either directly as consumers or indirectly as citizens and taxpayers.

The role of business management controls and related control activities is to provide an integrated set of governance, risk, compliance, strategic and operational controls and performance measures and compliance indicators to support and facilitate the operation of the primary, the support and the external parties’ activities of a business entity, and enable the prosperity and longevity of an organization beneficial to all.

Primary Activities are the activities of the organization that are directly concerned with the creation, provision and delivery of products and services to customers in alignment with the overall corporate strategy. These primary activities are, in most general cases: (1) **Inbound logistics**⁶ activities concerned with receiving, storing and distributing the inputs to the products and services offered, (2) **Production Operations**, concerned with all those production processes that transform the various inputs into final products and services, such as: manufacturing of products, provision of services, assembly, testing, packaging, locating the process, facilities and plant, etc.⁷, (3) **Outbound logistics**, concerned with all those activities associated with collecting, storing, and getting finished products and services to customers or bringing customers to the service, (4) **Marketing**, concerned with those activities to make products and services and their benefits known to the customers, (5) **Sales**, those activities associated with selling products and services according to a pricing strategy to the customers at a fixed location, over the internet, via sales networks, etc., and (6) **Maintenance Service**, all those activities associated with maintaining and improving the performance of products and services after they have been sold, such as: installation, repairs, training, customer support, etc.

Support Activities are the activities of the organization that help to improve the economy, efficiency and effectiveness of the primary activities of the organization in alignment with the overall corporate strategy. These are all the systems, policies and procedures that enable and facilitate the primary activities of the organization, such as: administration, finance, human resource management, planning, IT, quality control, security, purchasing, research and development, and general senior management, etc.

External Parties’ Activities are the activities of the organization that are directly involved in managing the relations and transactions of the organization with its external partners in

alignment with the overall corporate strategy and the primary and support activities of the organization. These are: Customer relationships, Distributor relationships, Vendor relationships, Joint venture projects, and Outsourcing relationships.

All these organizational activities require controls in order to be executed the most effective way. This is the role of business management controls.

Business management controls are usually expressed by the institution, design and implementation of internal control frameworks, standards, rules, guidelines, policies, procedures, practices, declarative statements, activities, etc., and a set of organizational, strategic and operational controls. All these are usually monitored by **performance measures** and **compliance indicators, with the facilitation of a performance management system and a compliance program and action plan.**

Business management controls are made up of governance, risk, compliance (collectively termed GRC), strategic and operational controls. GRC controls are required as a prerequisite so that strategic and operational controls achieve their purpose. GRC controls relate to organizational, enterprise or corporate governance, administration, compliance, risk, human resource management and other overhead functions of organizations, such as: legal, purchasing, compliance, data management, business continuity, etc. Strategic controls relate to strategy. Operational controls relate to operational activities like finance, production, IT, etc.

The concept of **organizational control** is implicit in the bureaucratic theory of Max Weber⁸. Associated with this theory are such concepts as "span of control", "closeness of supervision", and "hierarchical authority". Weber's view tends to include all levels or types of organizational control as being the same. More recently, writers have tended to differentiate the control process between that which emphasizes the nature of the organizational or systems design and that of operations. To illustrate the difference, we "evaluate" the performance of a system to see how effective and efficient the design proved to be or to discover why it failed. In contrast, we operate and "control" the system with respect to the daily inputs of material, information, and energy.

In both instances, the elements of feedback are present, but organizational control tends to review and evaluate the nature and arrangement of components in the system, whereas operational control tends to adjust the daily inputs.

The direction for overall organizational control comes from the **general strategic goals and strategic plans** of the organization. General strategic plans are translated into specific performance measures such as share of the market, earnings, return on investment, budgets, customer satisfaction, etc.

The process of **organizational and strategic** control is to review and evaluate the performance of the system against these established norms. Rewards for meeting or exceeding standards may

range from special recognition to salary increases or promotions. On the other hand, a failure to meet expectations may signal the need to reorganize (organizational control), change strategic direction or redesign (strategic control).

Performance measurement of private and public organizations is the basis for the development of a business management control system. The standardized model of the Balanced Scorecard framework offers management a dynamic tool for the development of such a business management control system. This system measures all the critical dimensions of organizational performance (financial, customers, internal corporate processes, and employee learning and innovation).

In contrast to organizational and strategic control, **operational control** serves to regulate the day-to-day output relative to schedules, specifications, and costs, by the formulation of policies and execution of corresponding procedures (e.g., is the output of product or service the proper quality and is it available as scheduled?).

The purpose of organizational and strategic control is to see that the specified function is achieved. The objective of operational control is to ensure that variations in daily output are maintained within prescribed limits. It is one thing to design a system that contains all of the elements of control, and quite another to make it operate true to the best objectives of design. Operating "in control" or "with plan" does not guarantee optimum performance. For example, the plan may not make the best use of the inputs of materials, energy, or information - in other words, the system may not be designed to operate efficiently. Some of the more typical problems relating to control include the difficulty of measurement, the problem of timing information flow, and the setting of proper standards.

Operational control systems are designed to ensure that day-to-day actions are consistent with established plans and objectives. It focuses on events in a recent period. Operational control systems are derived from the requirements of the business management control system.

Corrective action is taken where performance does not meet standards. This action may involve training, motivation, leadership, discipline, or termination. The differences between strategic and operational control are highlighted by reference to a set of main fundamental differences between strategic and operational management, as depicted next. Strategic Management is very ambiguous, most complex, organization-wide, most critical to long term survival and has long-term implications. Operational Management on the contrary, is less ambiguous, less complex, specific to functions, less critical to long term survival and has short-term implications.

These business management controls, as practice has shown, require an overall internal controls framework so that they can function in the most optimal way.

4. Proposed Business Management Controls Framework

Internal Control, according to the latest COSO draft guidance document⁹, 'is a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: Effectiveness and efficiency of operations, reliability of reporting and compliance with applicable laws and regulations'.

Business management controls and their performance measures follow this approach. These may be designed and implemented by models such as the BSC. Compliance measures may be designed and implemented by internal control frameworks, such as: COSO Framework (www.coso.org), Sarbanes-Oxley Act (www.soxlaw.com), **COBIT** (www.isaca.org) and BIS Framework (www.bis.org), briefly described next, but not the main subject of this book, and monitored by and the Corporate Governance, Risk and Compliance (CGRC) System.

COSO is the internal control framework developed by the Committee of Sponsoring Organizations of the Treadway Commission. COSO was created in 1985 to sponsor the National Commission of Fraudulent Financial Reporting (or the "Treadway Commission") in order to explore issues in fraudulent financial reporting.

The Sarbanes-Oxley Act (SOX) is a U.S. law that requires the chief executive and chief financial officers of public companies to attest to the accuracy of financial reports (Section 302) and require public companies to establish adequate internal controls over financial reporting (Section 404). Passage of SOX resulted in an increased focus on IT controls, as these support financial processing and therefore fall into the scope of management's assessment of internal control under Section 404 of SOX.

COBIT focuses primarily on efficiently and effectively monitoring information systems. The framework emphasizes the role and impact of IT control as it relates to business processes. This control model can be used by management to develop clear policy and good practice for control of IT.

The **BIS Framework** for Internal Controls for Banks, is used mainly by banks, and was developed by the Bank for International Settlements (BIS).

On the basis of COSO and other internal control frameworks, management, with the possible assistance and support of external experts, must, for efficiency and effectiveness reasons of the organization, craft and implement a business management controls framework, according to the goals, demands, objectives, needs, external regulations and expectations of all stakeholders of the organization and taking into consideration the thoughts and activities of all participants in its affairs and operations.

Such an internal controls framework made up of control processes at five levels of business operation, **interconnected and integrated to function as a whole**, is proposed in figure 1.1.

The **Business Management Controls Framework (BMCF Control 1)** will be complemented by a **Business Management Controls System Manual (BMCF Control 2)**, as described next.

Figure 1.1.: Business Management Controls (BMC) Framework

Level of Business Operation	Examples of Business Management Control Processes
First Level (Organize)	Set up: 1. Board, management and committee roles, structure and responsibilities, 2. Business functions and resources, 3. Standards, policies and procedures, 4. Internal Controls Framework and Manual. .
Second Level (Envision)	Institute: 1. Corporate culture, vision, mission and values, 2. Strategy, goals, objectives and targets, 3. Performance Framework and Management. .
Third Level (Govern)	Implement: 1. Strategy, 2. GRC (Governance, Risk and Compliance) controls, 3. Operational controls (purchasing, finance, IT, data, security, fraud, etc.), 4. Personnel administration, including segregation of duties, compensating controls, etc., 5. Management & compliance reporting.
Fourth Level (Audit)	Carry out: 1. Monitoring controls 2. Internal audits, 3. Self-assessments, 4. External audits, 4. Regulatory audits.
Fifth Level (Augment)	Compare organization to external entities: 1. Studies by external experts, 2. Certify personnel, 3. Certify organizational components (structure, service quality, policies and procedures), 4. Corporate social responsibility, including community involvement, etc. 5. Soft Controls.

Business Management Controls System Manual (BMCF Control 2)

The contents of this manual, as an example, will include the following:

1. Purpose and Objectives

The purpose of this manual (or guide) is to satisfy the basic objectives of most business systems as they relate to carrying out the operational activities of the Organization ‘XXX’ (‘Name of Organization’). It addresses five interrelated components of internal control as specified by COSO:

- (a) The organization's operating environment,

- (b) Goals and objectives and related risk assessment,
- (c) Controls and related policies and procedures,
- (d) Information systems and communication methods, and
- (e) Activities to monitor performance.

The main objective of this document is to convey to all (management, staff, external parties, etc.) that (a) management is responsible for ensuring that internal controls are designed, developed, established, properly documented, maintained and adhered to in each unit, department, business function, project and activity of the organization and (b) all employees of the organization are responsible for adherence and compliance with these controls.

2. Scope and Applicability of Internal Controls

The controls documented in this manual and other relevant documents (corporate policies and procedures, compliance program, strategy plan, etc.), apply to all business functions, units, departments, operations, activities and projects of the organization. The examples of control activities contained in this guide and other associated documents are not all-inclusive or exhaustive of all the specific controls appropriate in each department, business function, or unit. Over time, business management controls may be expected to, and will more than likely, change to reflect amendments and improvements in the operating environment of the organization. Management must ensure that the controls are always monitored and constantly reviewed to improve the aspects of safeguarding of assets, the reliability of financial information, and the compliance with laws and regulations.

3. Management and Staff Responsibility

The board of directors of the company is responsible for supervising and monitoring the good and effective execution, review and improvement of all internal controls.

Management is responsible for ensuring that internal controls are designed, developed, established, properly documented, maintained and adhered to in each unit, department, business function, project and activity of the organization.

All employees of the organization are responsible for adherence and compliance with these controls.

4. Detail Business Management Controls

The detail business management controls relate to the following issues:

- 4.1. Enterprise governance controls (Board and Executive Management Controls, Regulatory Controls, Management Philosophy and Operating Style Controls, Organizational Controls, Administration controls, Segregation of Duties and Functions, etc.),
- 4.2. Governance, Risk and Compliance (GRC) System,
- 4.3. H/R management controls and measures,
- 4.4. Compliance Program,
- 4.5. Enterprise Governance Procedures,
- 4.6. Risk Management,
- 4.7. Business Management Reporting Procedure,
- 4.8. Legal Procedures,
- 4.9. Strategic Planning,
- 4.10. Financial management controls,
- 4.11. Production management controls,

- 4.12. IT management controls,
- 4.13. Business Data Management Controls (Files, Documents and Records (FDR) Management Controls, FDR Management Procedures, etc.),
- 4.14. Performance Management Frameworks, performance measures and compliance indicators,
- 4.15. Corporate governance mechanisms and internal control (Board of Directors, Auditing, Segregation of duties and functions, Remuneration, etc.

The detail control activities and associated control procedures are documented in the specific Corporate Policies and Procedures Manuals and related control practices of all departments of the organizations.

The **business management controls framework** and the control activities that enable its full operation are usually complemented by a set of performance measures and compliance indicators which are monitored by management to ensure the good effect of all these controls.

5. Performance Measures and Compliance Indicators

The **role** of performance measures and compliance indicators is to support and enable the easy monitoring and reviewing of all types (financial, production, etc.) of the business management controls functioning in a given organization.

A **performance measure** is a description of what is measured to determine the extent to which objectives and outcomes have been achieved and to what level. Some examples of performance measures are: Stock market price, return on investment, return on assets, number of coding errors found during formal testing, number of test case errors, number of changes to customer requirements, etc. Also performance measures can be used in risk management, as in many cases, a company may be able to track the status of a risk using existing key performance indicators (KPIs); for example, an organization's voluntary attrition rate, often monitored by HR as part of its talent management responsibilities, may do double duty as a key risk indicator for talent risk¹⁰. The use of Key Risk Indicators is one of the BIS recommendations for sound operational risk management, and thus an essential component of Basel II framework¹¹.

A **compliance indicator** denotes¹²: (a) whether plans, policies, procedures, etc., exist or not, (b) whether these are followed or not, and (c) whether the organization complies or not to the specific state laws, industry standards, ethics codes, such as: SOX act, Data Privacy Laws, Banking Regulations, ISO Standards, etc.. Some examples are: Corporate security policy not crafted, IT Security policy not formulated, etc.

6. Conclusion

In order for business entities to be beneficial and effective to society, its shareholders and stakeholders and survive in the long-term, they must improve if not excel as regards their market share, competitiveness, financial results, use of capital and other resources, productivity, customer satisfaction, quality, innovation and ethics, among other things. They usually achieve these by managing and controlling, using a set of business management controls in the most optimal way, all the primary (logistics, production, sales, marketing, etc.), support (administration, finance, human resource management, IT, quality control, security, purchasing, etc.), and external parties' activities (customer relationships, distributor relationships, vendors, etc.) of the organization.

The controls identified in this paper (Business Management Controls Framework (BMCF Control 1) and Business Management Controls System Manual (BMCF Control 2)) are considered to be part of the **First Level (Organize Level) of Business Operation of the BMC Framework** (see Figure 1.1.: Business Management Controls Framework) that can be deployed to protect organizations against fraud, asset abuse, reputational damage and other risks that may be faced with, while enabling them to reach and improve their performance and compliance objectives and targets.

In closing, management must decide, on the basis of a study and given the particulars of their organization and its operating environment, which framework, controls, risk assessment and performance management model they should use for their organization.

7. Recommendation 1: BMC Framework Recommendation

The recommendation for business management controls (BMC) framework for organizations, in general, is noted in table 1.1.

Table 1.1.: BMC Framework Recommendation (Recommendation 1)

Recommendation 1: Create and implement a Controls Framework to satisfy your needs.

Key Points to Consider

The key points to consider in assessing this recommendation for your business environment are:

- (1) Managing a business, small medium or large, is quite a difficult and strenuous task,
- (2) Senior executive management must understand corporate management, compliance, strategic and operational controls and their manifestations and impact, and employ the right internal control framework and its components to suit the specific aspects of the organization they manage,

(3) As a minimum control, you may use the example of the internal controls framework and manual depicted in this paper (Business Management Controls Framework) and Business Management Controls System Manual) and change, improve, amend, craft and implement your own to suit your needs, company size, compliance requirements and business operating environment and culture, and

(4) At the level of each business function (finance, IT, sales, production, etc.) you will need specific controls to implement the proposed **BMC Framework**, such as:

- (a) Management Responsibility Controls,
- (b) Standards, Codes, Policies and Procedures,
- (c) Business Transaction and Information Processing Systems (manual or computerized) and
- (d) Business Performance Measures and Compliance Indicators.

All of these will be coupled by:

- (i) Governance, Risk and Compliance Controls (under development),
- (ii) Business Records Filing Systems (under development),
- (iii) Implementing Business Management Controls (under development), and
- (iv) Enhancing Business Operations Controls (under development).

8. End Notes

1. From Anglo-French. *contreroller* "exert authority," from Middle Latin, *contrarotulus* "a counter, register," from Latin *contra-* "against" + *rotulus* "wheel")
2. For controls related to public organizations, see: OECD (1996), "Management Control in Modern Government Administration: Some Comparative Practices", *Sigma Papers*, No. 4, OECD Publishing. <http://dx.doi.org/10.1787/5kml6gb4gn32-en>
3. e.g. Warren Bennis in his book 'On Becoming a Leader', others as noted in <http://changingminds.org>)
4. For more details, see chapter 12 of Hill, Charles W. L. and Gareth R. Jones (2002): *Strategic Management*. Houghton Mifflin Company).
5. For more, see: www.businessdictionary.com).
6. For more, see: Quayle, Michael and Jones, Bryan (2002): *Logistics: An Integrated Approach*. Cambridge Academic.)
7. For more see: Heizer, Jay H. (2010): *Operations Management*. Prentice-Hall.)
8. For more, see: Weber Max, Peter R. Baehr and Gordon C. Wells (2002): *The Protestant ethic and the 'spirit' of capitalism*. Penguin.)
9. See: www.ic.coso.org, Dec. 2011)
10. See also www.isaca.org for more information on the concept of key risk indicators)
11. See <http://www.bis.org>) and Sarbanes-Oxley Act (<http://www.sox-online.com/basics.html>).
12. For more on compliance, see: Silverman, Michael G. (2008): *Compliance Management for Public, Private, or Non-Profit Organizations*. McGraw-Hill.)