

## Formation of the System of Internal Audit in the Automotive Industry

<sup>1</sup>A.A. Ajupov, <sup>2</sup>A.A. Kurilova, <sup>3</sup>M.A. Azarskaya, <sup>3</sup>L.Y. Yakovleva and <sup>4</sup>T.U. Serebryakova

<sup>1</sup>Kazan Federal University, 420008 Kazan, Russia

<sup>2</sup>Togliatti State University, 445667 Togliatti, Russia

<sup>3</sup>Volga State University of Technology, 424000 Yoshkar-Ola, Russia

<sup>4</sup>Cheboksary Cooperative Institute (Branch),  
The Russian University of Cooperation, 428000 Cheboksary, Russia

---

**Abstract:** Process of an estimation to risk is one of the major making effective control systems at the enterprise. During an estimation to risk of the enterprises of a industry the description of processes of the internal control of the enterprises, revealing of potential brave of events, qualitative an estimation revealed to risk also drawing up of a card to risk on processes of the enterprises of automotive industry will be carried out.

**Key words:** Risk, the control, the enterprises of motor industry, a self-estimation to risk, revealed

---

### INTRODUCTION

The system of internal control in the automotive industry. Implementation of internal control-a mandatory feature of all business executives. Particularly relevant internal controls for the automotive industry, an industry that is exposed different economic processes. The study results show that the activity of enterprises of automotive present distinct economic processes (Reinhart *et al.*, 2011).

The presence of such economic processes it necessary to adapt the flexible internal environment in accordance with environmental conditions. To achieve this goal in the economic mechanism of the enterprise should be included such as an internal control mechanism.

### MATERIALS AND METHODS

**Theory:** Volume of internal control automotive industry companies include monitoring and analysis of the implementation of financial and economic plans in the automotive industry quality management system, control of maintenance of information, fire and environmental safety, control of the assets, monitoring compliance with legislation on the automotive industry, the preparation of all kinds of statements.

Managers at all management levels of the automotive industry companies, regardless of their affiliation and in accordance with the functional duties are responsible for organizing and maintaining an effective internal control system that ensures the achievement of goals in the following areas:

- Effectiveness and efficiency of financial and economic activity
- The accuracy of the statements of all kinds
- Compliance on the automotive industry of the Russian Federation, regulatory documents in the automotive industry as well as other documents regulating the various activities in the automotive industry

Managers at all levels of management companies are responsible for the automotive industry:

- The establishment and maintenance of the control environment in the subordinate units (system objectives, organizational structure, distribution of powers and responsibilities, policies and personnel management practices, ethical standards)
- Ensuring the functioning of the risk assessment process to make timely and informed decisions
- Development and implementation of control procedures in the subordinate units
- The organization of effective information management (identification, data collection and information exchange) and the preparation of financial statements
- Implementation of a continuous system of internal control monitoring (continuous monitoring and assessment of the internal control system)
- Providing public access to the necessary information, assets and personnel, during the periodic inspection of the internal control system

- Organization and control of the implementation of corrective actions to improve the internal control system, based on the internal control system for monitoring the results (both continuous and periodic)

For the purpose of centralized functional services, endowed with the functions of the internal control or audit the constant assessment of the status of the most important areas of the automotive industry enterprises control and internal control systems are organized. Their task carrying out periodic assessments of the reliability and efficiency of the internal control system in the allocated fields: audit of economic performance, the audit of the quality management system, internal audit and external financial tax reporting, auditing information systems, environmental auditing, auditing in other areas. It should be noted the importance of such a variety of internal audit as an audit of the costs and the development of measures for their optimization and reduction. Focusing on this species is needed in a periodically changing environment and in the face of strong competition experienced by the automotive industry (Burnham, 2013a).

Services endowed with the functions of internal controls or auditing matters, subject to the sole executive body in the automotive industry or the head, followed by fixed the responsibility for one of the areas of internal control. When the internal service control system checks, endowed with internal control and audit functions required to analyze and evaluate all the elements of the internal control system control environment, risk assessment, control activities, information and communication and monitoring. It should be noted the importance of the areas of work of the internal audit as an assessment of the risks specific to a particular automotive companies. Effective integration of the internal control system as a financial mechanism of the enterprise creates the preconditions for the creation of a risk-based control mechanism (Battini and Boysen, 2013).

Each service is endowed with the functions of the internal control or audit shall be obliged to develop, approve the leadership and bring in the automotive industry of the enterprise units of requirements for the audited areas, to develop regulations on internal audit activities, develop inspection plans and monitor the implementation of the corrective action plan, control and improve the quality of the internal audit activity to provide plans and management reports for approval and action.

Internal control a process performed by the authorities and personnel in the automotive industry, designed to provide reasonable assurance regarding the

achievement of the following objectives in the automotive industry; effectiveness and efficiency of financial and economic activities, including strategic and current aspects of management, preservation of shareholder's investments in the automotive industry and assets, the economical use of resources in the automotive industry.

**Reliability in the automotive industry:** The accuracy of all statements-compliance in enterprises automotive industry of the Russian Federation, regulatory documents in the automotive industry as well as the policies, rules, regulations and other documents that regulate different activities in the automotive industry. The objectives of internal control in the automotive industry are ensuring the confidence of investors and other stakeholders (including government, employees, partners, customers and suppliers, subsidiaries and affiliates and their shareholders) to the automotive industry and its management bodies:

- Promotion of ethical business and social responsibility
- Protection of shareholder's investments in the automotive industry
- Promoting effective and efficient operations, enabling the automotive industry to respond appropriately to significant risks
- Early identification and analysis of risks in the activities of the automotive industry

Safeguarding of assets and the efficient use of resources, including a guarantee that the automobile industry enterprises liabilities identified and managed; ensuring the achievement of the strategic objectives, including compliance with the approved strategy; promote the implementation of the strategic plan for the automotive industry; ensuring the completeness, reliability and accuracy of financial, management and tax reporting in the automotive industry as well as the transparency of the process of preparation of all types of reporting; promote the development of adequate communication between departments in the automotive industry and the processes of information security; prevention, detection and elimination of violations in the work departments in the automotive industry, including the misuse and loss of property and theft; promoting the construction of an optimal organizational structure of automotive industry companies, including an effective separation of powers and optimize for performance control procedures costs; contribute to the improvement of business processes in the automotive industry; ensuring compliance with the requirements of the Russian

legislation and regulations in the automotive industry. Effectiveness and efficiency of financial and economic activity.

From the perspective of the internal control system, all of the goals in the automotive industry and its constituent units, officially approved and established informally distributed in the following areas (categories): ensuring the effective and efficient implementation of operations in the automotive industry is the basic goal of doing business in the automotive industry and its affiliated companies (strategic and operational goals), including production targets and performance indicators-budgets, expenses, revenues, profits and so on.

Preservation of shareholder's investments and the automotive industry assets to ensure economical use of resources in the automotive industry a goal the prevention of loss of assets or resources of the organization as a result of legal violations, embezzlement, inefficient or inappropriate use, incorrect management decisions and as a result unforeseen circumstances. Objectives of the Information security this is primarily an information security objectives (protection of information). Other objectives of financial and economic activities ascribed to the area of internal control.

- The reliability and accuracy of all types of reporting
- The reliability and accuracy of the financial (accounting) reporting in the automotive industry

The reliability and accuracy of other types of information about financial and economic activity of Motor Vehicle Manufacturers (for internal and external users), including tax, statistical, administrative and internal operational reporting. Adherence to the automotive industry of the Russian Federation legislation and regulations in the automotive industry. Ensuring environmental safety this objective in the field of environment (including compliance with the automotive industry with environmental legislation).

Compliance with legislation in other areas of public relations are goals related to compliance with the automotive industry requirements of international law, civil and labor law and legislation in other areas. Compliance with regulatory and organizational and administrative documents in the automotive industry. Responsibility for the internal control on the automotive industry are the sole and collective executive bodies in the automotive industry.

Heads of departments in the automotive industry, regardless of their subordination and functional duties are responsible for the development, documentation, implementation, operation, evaluation and development of the system of internal controls in their units, on all elements of internal control.

**Control environment:** Control environment is integrated into all business processes of automotive industry companies and is part of its corporate culture. By Wednesday, the control system applies to the objectives, the organizational structure, the allocation of powers and responsibilities, ensuring interaction of structural units with each other and with external parties, the policies and practices of personnel management, ethics.

**Risk assessment:** The process of risk assessment is the identification and analysis of risks (internal and external) that threaten the achievement of the objectives. Managers are required to make timely and informed decisions based on risk assessments and implement risk monitoring. A prerequisite of risk assessment is the establishment of objectives, linked at different levels and coordinated with each other (Kohl *et al.*, 2013; Neto *et al.*, 2013; Burnham, 2013).

**Control procedures:** To control procedures include:

- Data processing procedures including the approval, approval of operations, confirmation of authority
- General and application control procedures of information systems (registration of user actions, semantic checking of input data, etc)
- Control of current activity (making performance monitoring)

Reconciliation, a comparison of operational and financial data from various internal sources (from different departments in the automotive industry or the various accounting systems); consideration of the results in comparison with the standards (budgets, plans, rules and regulations, predictions, previous findings, the results of the competition, etc.) and variance analysis, taking corrective action and re-evaluation of the standards; Physical control protection of assets and credentials, periodic counting and auditing activities; the separation of powers including the separation of functions according to the assets of operations, performance of operations, the reflection of operations in registration, storage assets and inventory holding them (in order to minimize opportunities for error concealment or theft).

Control procedures should be documented in the regulations in the automotive industry, including the appointment should be defined procedures, artist, time and modalities of information security and communications system. Information security and communications system includes tools for collecting, processing and transmission of information and all kinds of internal reporting. The transmitted information and statements, including, may be in electronic form. Communication channels must provide. The availability of complete and adequate information about the events and

factors that may affect the achievement of objectives. The effective transfer of information, “top-down” directives of heads of departments, guidance, control actions and information of a more general nature (personnel requirements to comply with the internal control, etc). Informing managers about the appropriate level of any identified control deficiencies, together with details of corrective actions that have been taken.

#### **Protect the information from unauthorized access**

**Monitoring:** Heads of departments are obliged to carry out continuous monitoring of the internal control system (continuous monitoring and assessment of the internal control system). Continuous monitoring is carried out on the basis of received reports on the activities while managers are required to analyze the received deviation and investigate their causes. In carrying out periodic inspections of the internal control system of the internal, managers are required to provide auditors access to the necessary information, assets and personnel related to audit objectives, audit and inspection period (Orio *et al.*, 2013).

According to the internal control system for monitoring the results (both continuous and periodic) heads of departments should:

- Organize the development and implementation of corrective action plans aimed at improving the activities
- Monitor the implementation of corrective action plans
- Direct the relevant services of the internal audit corrective action plans and report on their implementation

The system of internal control automotive industry companies based on the following principles. The continuity of the functioning of the internal control system which allows timely identification of significant risks and prevent their occurrence in the future. The accountability of all participants in the internal control system (quality of the internal control functions of each person is controlled by another party to the internal control system). The division of responsibilities (distribution of control functions so as to avoid duplication and consolidation of one and the same person of functions related to the approval of transactions with the assets, taking into account the operations and the safeguarding of assets):

- The proper approval and approval of the transactions
- Responsible for the proper execution of internal control functions

Continuous development and improvement (maintenance of conditions of functioning of the internal control system to meet new challenges, the expansion and improvement of the internal control system); carrying out a regular assessment of the effectiveness of internal control systems. Ensuring the independence of the services responsible for internal audit. Internal audit should be carried out in the automotive industry in the following areas:

- Internal audit of occupational safety and health
- Internal audit of the internal control system of safety, targeted and effective use of assets
- Internal audit of information systems
- Internal audit of the internal control system of internal preparation of financial statements
- Internal audit relationship with the staff and compliance with labor law
- Internal audit of compliance with the law (other than labor and environmental)
- Internal environmental audits
- Internal audit of business processes
- Internal audit of the quality management system
- Internal audit of external financial and tax reporting
- Internal audit of fire safety

Depending on the audit and established internal control system verification purposes, the service, endowed with functions of internal control and audit, can perform the following actions:

- Verification of the effectiveness of internal control procedures
- Verification of the reliability and completeness of accounting data
- Verification of the system of internal control over compliance with the requirements of regulations in the automotive industry
- Verification of the quality management system processes
- Assessment of protection and accounting of assets
- Assess the achievement of resource efficiency
- A comprehensive analysis of business operations
- Other types of inspections

As a result, the summary assessment is to be determined:

- Availability and effectiveness of all elements of the internal control system in the automotive industry
- Perform the tasks assigned to the internal control system in the automotive industry

## RESULTS AND DISCUSSION

Organization of internal audit at the automotive industry. Each internal audit service as designated for its functional areas shall: to develop and bring to the structural units of the automotive industry requirements for the internal control system to organize training of managers and staff in the automotive industry.

**To develop regulations on internal audit activities:** Make inspection plans and coordinate them to claim the leadership and bring to the audited units. Plans are being developed on the basis of audit risk assessment and management decisions. Officially notify the internal audit unit under test (must be stated audit objectives, scope and object of the audit, evaluation criteria, test period, the period of inspection, responsible for checking). Provide a draft report on the results of checks on the harmonization of the entity to include in the audit opinion units reports. The reports should contain an assessment of the effectiveness of internal controls in the audited unit as well as recommendations to address the comments and deficiencies. Send reports on the results of inspections of the management in the automotive industry, the head of the audited units. Check the corrective action plans developed based on the results of checks on compliance with the auditor's comments and monitor the results of implementation of corrective action plans (including follow-up checks). Provide information (reports, inspections of materials) to external parties (government agencies, external auditors and other parties in accordance with the negotiation procedure. Send reports on the implementation of the plan of inspections, notification of inspections plan adjustments. To monitor and improve the quality of auditing. Organize ongoing training and evaluation of its employees to provide the necessary experience of the staff in the relevant regulations in the automotive industry. Is available on request all information necessary to assess the effectiveness and adequacy of internal audit.

**Internal audit service have the authority:** During inspections to access information, assets and personnel in accordance with the objectives of the audit, audit, inspection period. If necessary, engage external independent experts, including the use of materials of the external auditors. To discuss audit findings directly with the leaders of all levels.

Internal audit service are coordinating the interaction of internal audit services, including the coordination of audit plans, sharing of audit materials and reports. Requests for materials and audit reports are sent to the internal audit service, defining the objectives and audit, the audit period (Burnham, 2013b; Dweiri *et al.*, 2016).

**To ensure the independence and objectivity of the internal audit staff:** Leadership in the automotive industry should ensure a sufficient degree of independence of the internal audit services required for the performance of their duty to provide objective assessments of the internal control system. Internal audit service must interact with the automobile manufacturers committee of the board of directors audit and senior management in the automotive industry. Internal audit service should develop and implement regulations that describe the ethical standards to be followed by the internal auditors such regulations are designed in particular, based on the "Code of Ethics of the Institute of Internal Auditors" or "Code of Ethics for Auditors of Russia".

Evaluating the effectiveness of the internal audit function is carried out in accordance with international professional internal auditing standards.

## CONCLUSION

The role of the administration and control of financial and economic activity of the enterprises of motor industry in the process of internal control. Internal control is a part of the financial mechanism of the enterprise and maintaining effective internal control is one of the tasks now controls (Kohl *et al.*, 2013). Individual and collective executive bodies of motor vehicle manufacturers are responsible for the creation and implementation of a proper internal control environment, the maintenance of high ethical standards at all levels of the automotive industry.

In order to monitor the effectiveness of the internal control of the company by the board of directors of motor vehicle manufacturers procedures should be established by the Audit Committee of the Board. Objectives and main tasks of the Board of Directors of the Audit Committee shall be determined at an appropriate position. The Audit Committee of the Board of Directors should include features, including evaluation of the effectiveness of internal control procedures and preparation of proposals for their improvement.

The Board of Directors of the automotive industry on the basis of information provided by the sole executive body and the Audit Committee of the Board of Director's, provides an annual assessment of the effectiveness of internal control of the company. Individual and collective executive bodies in the automotive industry solutions fulfill the Board of Directors the automotive industry companies to improve internal control procedures in the automotive industry.

Direct carrying out an independent assessment of the effectiveness of the internal control system manages the

internal audit and risk assessment. Heads of departments in the automotive industry are responsible for the development, documentation, implementation, operation, evaluation and development of the system of internal controls in their units. Control over financial and economic activity of the company carried out the Audit Commission in the automotive industry. The internal audit service shall:

- Coordinate a plan for internal control and audit for the year with the Audit Committee of the Board of Directors
- Interact with the Audit Committee of the Board of Directors, in the case of plans or adjustments to address emerging issues in the course of the audit
- Direct the sole executive body of the automotive industry companies and the Board of Directors, the Audit Committee reports on the results of the audit and the results of evaluations of the effectiveness of internal audits

Inform the sole executive body of the automotive industry and the Audit Committee of the Board of Directors of the violations identified in the course of control. To organize the interaction with the external audit. To provide an opinion on the plans of the external auditor of the financial statements; upon request to provide an opinion on the plans of other external auditors. The Internal Audit Service is involved in the implementation of individual assignments of the Audit Committee of the Board of Directors. The internal audit service shall liaise with the Audit Commission of the automotive industry:

- Transmitting working materials inspections
- Transmit the reports for the current year and previous periods on the results of inspections and audits

An important step is to provide a service of internal audit reports of the audit committee of the board of directors of the Audit and the Audit Commission of Motor Vehicle Manufacturers for further analysis and study. The reports should contain, including; information on the identified shortcomings of the internal control system, including the impact that they have had or will have on the activities of the automotive industry; assessment of changes in the nature of risk and the degree of their importance (as compared to the last annual assessment); evaluation of the possibility of domestic automobile industry enterprises control system effectively respond to business change and the environment; evaluate the effectiveness of the processes on the formation of public accountability.

Composition study reports and depth would depend, including the from economic situation in organization. For example, in the decline stage of information should be aimed at finding solutions to organizational problems accumulated and stage of maturity at improving organizational effectiveness (Hrovat *et al.*, 2012).

## REFERENCES

- Battini, D. and N. Boysen, 2013. Management control in the automotive industry. *J. Manage. Control*, 24: 93-94.
- Burnham, K., 2013a. Developments in control within the automotive industry-Part 1: An introduction. *Meas. Control*, 46: 271-271.
- Burnham, K.J., 2013b. Developments in control within the automotive industry-Part 2: An introduction. *Meas. Control*, 46: 302-302.
- Dweiri, F., S. Kumar, S.A. Khan and V. Jain, 2016. Designing an integrated AHP based decision support system for supplier selection in automotive industry. *Expert Syst. Appl.*, 62: 273-283.
- Hrovat, D., D.S. Cairano, H.E. Tseng and I.V. Kolmanovsky, 2012. The development of model predictive control in automotive industry: A survey. *Proceeding of the 2012 IEEE International Conference on Control Applications (CCA)*, October 3-5, 2012, IEEE, Washington, D.C., USA., ISBN: 978-1-4673-4503-3, pp: 295-302.
- Kohl, J., F. Risch, S. Menzyk and J. Franke, 2013. Simulation-based dimensioning of Inventory-Implementing the fundamentals of Lean management in the production control of a two-stage manufacturing in the automotive industry. *J. Econ. Factory*, 3: 143-147.
- Neto, M.S., O.M.S. Truzzi and C. Kirschbaum, 2013. Isomorphism and institutional control in a modular plant of the automotive industry isomorphism and institutional control in a modular plant of the automobile industry isomorphism and institutional control in a modular plant for the automotive industry. *Rev. Bras. Bus. Manage.*, 15: 524-544.
- Orio, D.G., J. Barata, C. Sousa and L. Flores, 2013. Control system software design methodology for automotive industry. *Proceeding of the 2013 IEEE International Conference on Systems, Man and Cybernetics*, October 13-16, 2013, IEEE, Lisbon, Portugal, ISBN: 978-1-4799-0652-9, pp: 3848-3853.
- Reinhart, G., P. Engelhardt, E. Genc, M. Niehues and M. Ostgathe, 2011. Approach for a cross-company planning and control of processes in the automotive industry. *J. Econ. Factory*, 5: 326-331.