



## **ACCOUNTING INSTITUTE: ON THE GENESIS AND IMPACT OF MANAGEMENT REVOLUTIONS**

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### **ABSTRACT**

The aim of the study is to establish the presence of a causal relationship between the historical development of the accounting system (its modification) with management revolutions, identification of new characteristic features and accounting functions arising from changes in management approaches and requirements for accounting information for management purposes. Achieving the goal of the study involves identifying opportunities for further improving the accounting system based on the experience of its genesis under the influence of managerial revolutions. The methodological basis of the study is the dialectical method of cognition. The use of the historical method allowed to establish the logical dependence of the evolution of accounting on the requirements of the management system. Analytical and systematic methods were used to identify and form descriptions of the relationship of the



accounting system in budgetary institutions with the processes of management system transformation and management revolutions. The impact of managerial revolutions on the accounting system in Ukraine and their consequences are established on the basis of an empirical generalization of historical archival and literary descriptions, as well as a critical analysis of the regulatory regulation of accounting, its norms and practices. The existence of a direct influence of managerial revolutions on the content, requirements, principles and methods of accounting is justified. The above result is based on the results of the analysis of the historical content of accounting, its evidence (accounting documents), as well as the assessment of the functions of the persons who carried out the accounting. The study of works on the history of accounting made it possible to assess the genesis of the introduction of the institutional approach and accounting as the basis for its transformational changes aimed at strengthening compliance with management needs. The study showed that accounting is changing under the influence of transformations in management, changes in its requests, determined by the existing needs of management.

**Keywords:** Accounting; Reporting; Genesis; Institutionalization; Management Revolutions

## 1. INTRODUCTION

The systemic transformation of management, which takes place in the public (public) sector of Ukraine, requires a change in the requirements for the composition and content of information data provided by the accounting system. In turn, this affects the accounting concept and requires the formation of better theoretical, methodological and organizational principles of accounting as a basis for information management.

Solving the problem of forming an accounting system that can meet the requirements of different levels of government in providing information of a clear format and scope, as well as in the necessary time intervals, is an important research task.

We believe that the consideration of the genesis of accounting is the basis for the formation of a more advanced concept through the development of theory, organization and methodology. Based on the assessment of the features inherent in a particular historical period, it becomes possible to form new characteristics and determine the tools of the accounting system.

The scientific approach to the establishment of patterns and features of each historical period allows to identify and systematize possible ways to improve and modernize the accounting system, while adhering to the laws of expediency. The study of historical aspects



of the development of the accounting system, in our opinion, is a source of formation of its new concepts, principles, functions, methods and techniques. In addition, the most important result of such research may be the formation of a new theoretical paradigm and the development of innovative methodology based on the use of trends not only in accounting but also a set of basic sciences, including modern information systems, modeling theory, mathematical statistics and others.

The relevance of such a study is enhanced by decentralization processes and its results in Ukraine. The relevance of such a study is enhanced by decentralization processes and its results in Ukraine. To confirm, we present the results of polls conducted by the Ilko Kucheriv Democratic Initiatives Foundation together with the Razumkov Center's sociological service. The survey was conducted from 14 to 19 August 2020 in all regions of Ukraine except the Crimea and the occupied territories of Donetsk and Luhansk regions. 2,022 respondents over the age of 18 were interviewed by face-to-face interviews at the place of residence of respondents in a sample representing the adult population. The theoretical sampling error does not exceed 2.3%.

Survey results:

Since the beginning of the decentralization reform in 2015, local budget revenues have increased significantly. Have you felt any results of using these funds (improving the quality of services, landscaping, social assistance) during this time?

Table 1: Have you felt any results of using these funds during this time?

	<i>August 2016</i>	<i>June 2017</i>	<i>August 2018</i>	<i>August 2020</i>
Yes, I felt some changes for the better	16,2	16,5	18,2	26,8
No, I did not feel any changes	67,2	55,4	60,8	46,7
I only felt the change for the worse	8,4	16,4	13,9	12,1
Hard to tell	8,2	11,7	7,2	14,3

Source: Razumkov Center's (2020)

We believe that such not very optimistic results of decentralization in Ukraine are due to the shortcomings of the accounting system in the public sector. Despite its reform, carried out in accordance with the approved Accounting Modernization Strategy, it is not a sufficiently effective source of information for management and control. Which negatively affects the results of decentralization.

The history of accounting, which is studied by many Ukrainian and foreign scholars, in this context is an important tool to improve the quality of this system and strengthen its control function. The value of scientific understanding of the historical development of the principles



of accounting is explained by the important role of history in determining the possibilities for further improvement of accounting.

## 1. LITERATURE REVIEW

Studies of specialized literature sources that cover the issues of public property accounting (starting with community property), and which in one way or another in connection with the systemic transformation of management and development of state institutions relate to accounting in budgetary institutions indicate that the discussion of the role of management in the formation of the accounting system is not completed. The issue of the date of occurrence of accounting in the public sector has also not been resolved.

In particular, Svirko (2006) notes that an important point should be the starting point of the formation of the Ukrainian state and argues for his position. Thus the scientist gives the detailed list of information sources and the characteristic of features of development of the account, since VI century. to this day.

The opinion that the accounting of public property originated in the primitive communal system is also entitled to exist. Thus, Marx (1885) noted that already in the oldest communities there is an accountant and accounting is a function of the official of the community. That is, the need for accounting is related to the need to register the economic facts that were carried out within the social structural unit, and therefore it is more appropriate to consider it as a practical activity. Nevertheless, this period should be positioned as a stage in the emergence of community accounting.

However, we believe that it is more important not to establish the date of birth of accounting, but to investigate how its content and organization depended on the managerial revolutions. This position is not new, because many scientists emphasize that it is the management system that determines what should be the accounting and what accounting data are needed to make management decisions.

In particular, recent research on this issue has been conducted by Rasid, Saruchi and Tamin (2019). In it, the authors argue that the awakening of modern technology in the era of this 4th Industrial Revolution (4IR) has had a tremendous impact on the entire landscape around the world, including the business sector. To be aligned with the technological advancements, management accountants have to keep proactive and prepare for any unexpected changes to ensure that their business remains lucrative and stays relevant in the industry.

Nonetheless, the changing role of the management accountant due to the presence of 4IR is imminent. As a result, this paper deliberates on how the 4IR changes the role of management accountants, including what knowledge and skills are crucial for them to grasp in order to adapt adequately in this 4IR era. In addition, this paper also reviews the challenges that they have to face. The study can be of prime importance to business firms in identifying the role of the management accountant in this 4IR era and to prepare for the ubiquitous challenges that may perturb their efficacies. Agreeing with this position, it should be noted that we believe that every management revolution has had its impact on accounting. Proof of this is the development of management accounting. The principled position on the purpose of such accounting is laid down even in its name.

Without going into a detailed review of the stages of development of management accounting and its basic concepts, which are described in detail by many other scholars and practitioners, such as Kaplan (1984) and others, we note that management accounting in the public sector is insufficiently studied.

Instead, the history of accounting shows that each new stage is appropriately linked to the transformational changes that take place in the management system and that affect the purpose, objectives, principles and functions of accounting.

## **2. METHODOLOGY**

The methodological basis of the study is the dialectical method of cognition. The use of the historical method allowed to establish the logical dependence of the evolution of accounting on the requirements of the management system. Analytical and systematic methods were used to identify and form descriptions of the relationship of the accounting system in budgetary institutions with the processes of management system transformation and management revolutions.

## **3. RESULTS**

### **3.1. Systemic transformation of management (managerial revolutions) and its impact on accounting in the budget sphere**

The process of targeted and structural change of management approaches can be positioned as a systemic transformation of management, which is a factor that has a direct impact on the development of accounting methodology. Therefore, it is advisable to distinguish the stages of its development in accordance with the sequence of changes in management

requests (depending on the change of management requests and purpose) and the corresponding formation of new accounting characteristics.

Agreeing with the predicted debatability of the author's position, it should be emphasized that it is important in terms of historical background and role in the process of understanding the development of accounting as a professional activity and science. In this regard, the existence of the concept in question has its meaning, and therefore it should be specified by providing appropriate characteristics.

In the modern scientific literature, considerable attention is paid to ensuring the appropriate adequacy of information produced by accounting, and the problems of its compliance with the requirements of the management system. It is fair to recognize the impact of the latter on the system characteristics, as well as the tasks, methodology and organization of accounting.

This is confirmed by the historical development of not only the theory but also the practice of its conduct, comparing the characteristics of accounting in different historical periods, in particular after the administrative revolutions. It is fair to say that in various scientific sources there is no consensus on the number and types of such revolutions.

The basis of our study is the position of Novychkov (2007), who scientifically substantiated the existence of ten administrative revolutions. Thus, the emergence of accounting from a theoretical point of view is considered the first stage of its development. Its characteristic features are: the need for knowledge about the volume of objects of accounting; possibility to save information; motivation to control values (a certain stock of products is required for survival).

The given characteristics are quite logical to carry to the plane of performance taking into account the information function (3rd century BC). This stage is characterized by the fact that it belongs to the period of the first administrative revolution, which was called organizational and state. It is she, in our opinion, became the basis for the emergence of accounting for community property.

The transformation of management structures, in particular the transition from individual to public management required new approaches to the formation of information. The mere availability of data on the amount of resources no longer met the needs of management. There was a need to manage the use of resources, which involved the formation of data on the directions of their consumption.

Evidence of the actualization of this problem was the beginning of the activities of managers-functionaries. Accounting began to play the role of an information source of community property management. Accordingly, a certain accounting structure began to form, which, in addition to information on income and expenditure for control purposes, began to serve as a basis for planning and forecasting. The management vertical of the accounting information movement appeared and the consolidated information began to be formed.

The second administrative revolution (religious-commercial) is associated with the transition to a centralized management structure and the participation of government agencies in commercial operations. This required the formation of information to which external interested users would have access. However, because the storage media was not compact, access to such information was limited.

A peculiar way out of the situation was the emergence of the first written accounting records on papyrus, which provided for the grouping of objects of accounting. The complication of the management structure of the community hierarchy from the grassroots management functions has led to improved accounting, the emergence of systematic records and compilation of data. This allowed you to control the status and volume of objects and their groups, as well as generate generalized data. A characteristic feature of this historical period of development of accounting was the transition from private management (in a separate subsistence economy) to the formation of elected boards and their officials (magistrates), who were in charge of certain industries, including finance, military affairs, courts, taxes, etc. (Figure 1).

Defined in Figure 1 characteristic features of accounting confirm the position that the first stage of its development in the historical period (before the V century BC) corresponds to a change in the organization of public life in accordance with the emergence of state principles (ancient Egypt, Sumer, Chersonese) and two administrative revolutions (organizational-state and religious-commercial), which required the formation of social information and control over the use of common property.

Therefore, this stage can be considered religious and commercial and positioned with the emergence of the information function of accounting and the formation of the principles of data collection. To achieve this function of accounting and generalization of information, as evidenced by studies of historical sources (Jäger, 2010; Leyerer, 1919), there are appropriate

prerequisites: responsible persons (managers) and primitive written reflection of accounting transactions.

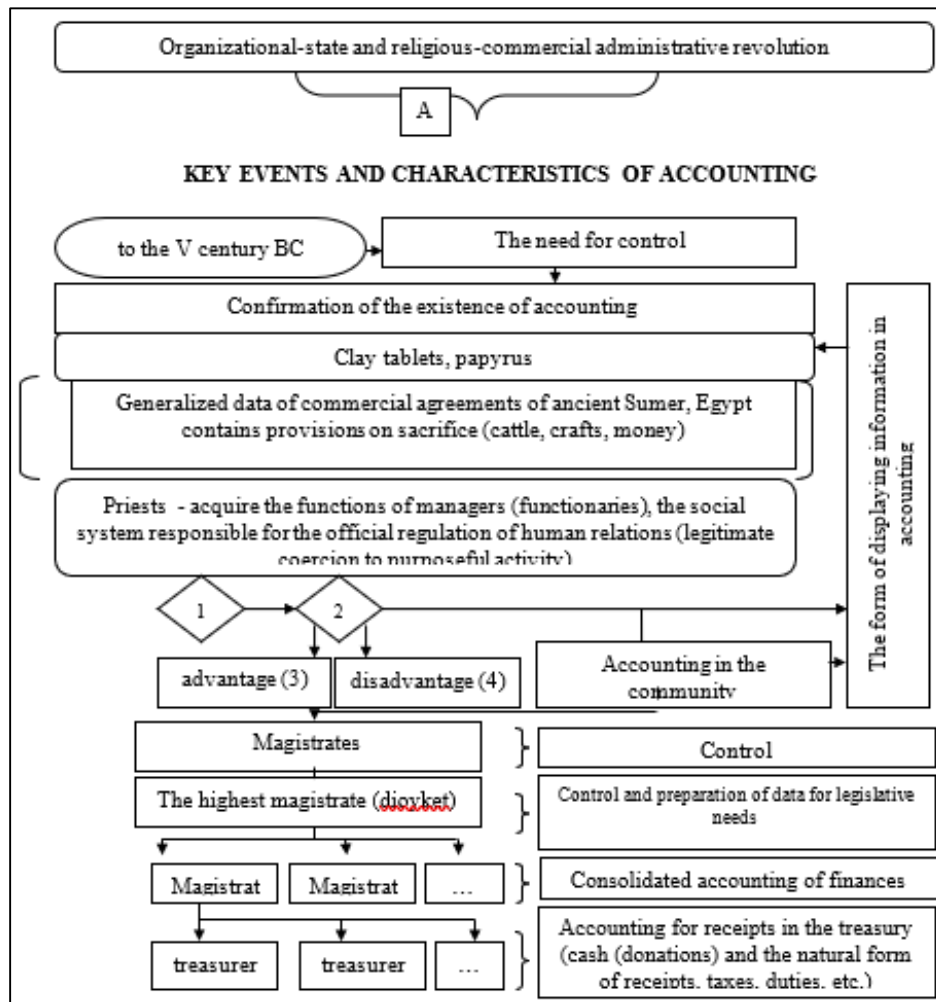


Figure 1: Characteristic features of accounting for the period of the first and second administrative revolutions<sup>1</sup>

The third administrative revolution (secular-administrative) led to the strengthening of the role of the state in the management of finances and activities of state institutions, and also served as a basis for regulating the whole complex of social relations, including the

<sup>1</sup> **Notes:** A - religious and commercial stage of development of accounting; 1 - management was formed first as a tool of commerce, and later began to become a social institution and a professional occupation that combined management and accounting. Priests began to perform the following functions: managing the collection of taxes, managing the state treasury, regulating the state budget, conducting property affairs, performing supplier functions and functions that belong to the competence of accounting; 2 - maintaining business and accounting documents, accounting accounts, control, planning, etc. ; 3 - the emergence of the first written accounting records of a simple form for memorizing, controlling and forecasting areas of expenditure, the use of a multiplication table, inventory; 4 - there is no general methodology, complexity and need for appropriate large storage facilities, unavailability of data to a wide range of interested users due to a side effect of management and accounting activities of priests - the emergence of writing inaccessible to the general public, fragmentation and conciseness of records, the possibility of data destruction.



development of social protection, application of motivation. This became the basis for further development of the information function of accounting. But at the same time, it became the basis for the emergence of valuation as an element of the method of accounting. This stage falls on the second century BC. Its characteristic feature is the formation of the first formal organization of regulation of relations in the field of accounting, as well as the transfer of managerial powers from priests to government officials (holders of state power) (Figure 2).

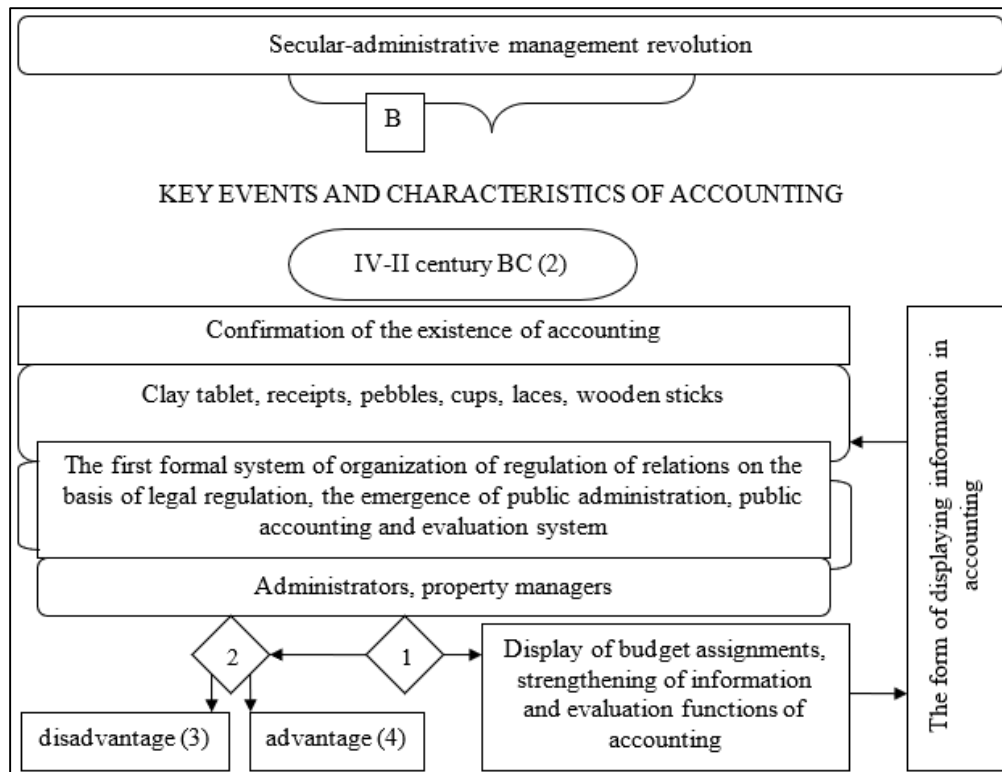


Figure 2: Characteristics of Accounting in Period of the Third Administrative Revolution<sup>2</sup>

The centralization of power that took place during this period required a concentration of information on government spending. During the period under review, accounting is closely linked to the registration of estimates for the distribution of public funds.

The basis for establishing the directions of their use are regulatory documents (decrees, orders). Although these were mainly decisions made by tsarist individuals alone, they were public in nature and concerned the organization of meeting various needs for the community (including the maintenance of troops, doctors, courts, etc.).

<sup>2</sup> Notes: B - social, socially-oriented stage of development of accounting with signs of strengthening state regulation and control; 1 - orders on the use of the state treasury were issued to managers-managers for execution. Among other things for the leadership, these were specific social tasks related to the protection of the population; 2 - keeping state records regardless of the temples; 3 - significant size (volumes) of documents, conducting an inventory once every two years, keeping records in individual farms; 4 - regulation of accounting, the acquisition of its valuation function (due to the advent of money), a systematic chronological approach to record keeping, income and expenditure accounting, the use of seals, signatures to certify documents, a kind of delineation of accounting by objects (for example, pebbles are used for accounting as "primary documents", and cups - as "accounting registers" for data compilation), completeness, storage in the archive, the inventory.

Despite the peculiarity of primitiveness, which is manifested in the ways and methods of ensuring revenues to the treasury and their reflection in the books, the achievement of this period of historical development is that relations are beginning to develop, which in later times were called public finance.

Accounting in this period becomes regulatory. Its key feature in relation to public expenditures is the centralization of management, the presence of persons responsible for the payment and accounting of taxes. This stage is associated with strengthening the social role of accounting for the population, the emphasis on the use of separate accounting of different farms and the implementation of control procedures, in particular the use of such an element of the method of accounting as inventory.

Thus, there is a development of both the management system and accounting as its main source of information. In particular, the regulation of accounting begins and the obligation to keep it is established, as well as the main components are determined - the balance sheet, state accounting books. In general, accounting is made more suitable for control, management and regulation (Figure 3).

State attention at this time was paid to the collection of taxes and the distribution of collected resources for public needs. The emergence of treasurers indicates the transformation of the management system, the essence of which is to impose responsibilities for the collection and distribution of public funds to those responsible at the executive level. In this context, accounting has begun to play a regulatory role.

Historical period of I-III centuries distinguished by the advent of Roman law, itinerant scribes (prototype of hired accountants), as well as the development of the treasury (in England). This time period is the origin of monetary relations (including the use of various items to provide them - animal fur, metal axes, etc.). In the classical sense, the first banknotes in Ukraine appeared during the reign of Volodymyr Sviatoslavovych the Great (980-1015).

These were the so-called "gold coins" and "silver coins" (gold and silver coins). Prior to that, the issues of Greek colonies, coin products of ancient Rome, Arab dirhams, etc. were used in our country. In the accounting system, the emergence of money has led to the development of the reflection of exchange equivalents, i.e. to the use of cost measures. In the IV-XVIII centuries. simple accounting is conducted, there are requirements for the targeted use of funds, income and expenditure books, reports, journal-main, balance sheet and other accounting documentation are used. This period was the fifth administrative revolution, which was called the geographical (as a result of geographical discoveries of the XV-XVII centuries). Its impact on the accounting system manifested itself in the form of the spread of accounting

experience from one country to another, attempts to harmonize the order of reflection of exchange transactions in accounting.

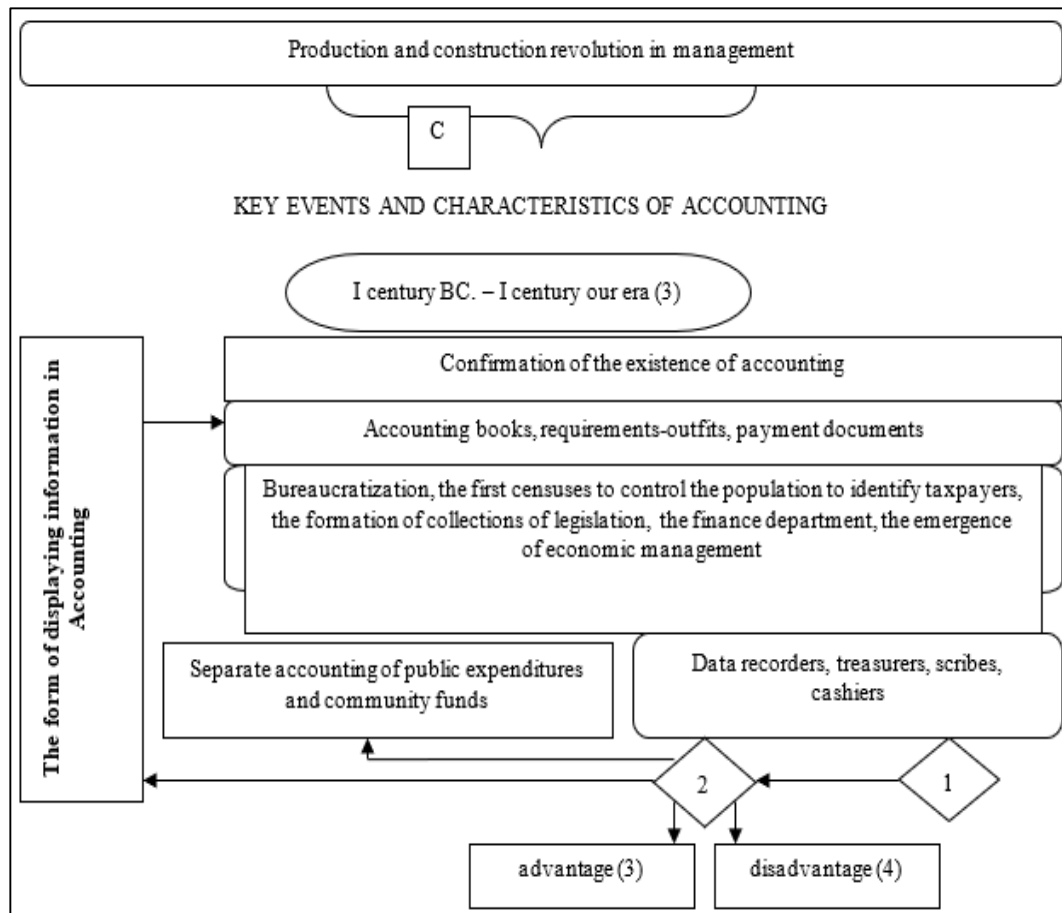


Figure 3: Characteristics of Accounting in Period of the Fourth Administrative Revolution<sup>3</sup>

The sixth administrative revolution, called the "liknep revolution", took place in the XVI-XVII centuries. The key event in it was the appearance of the first printing press. Thanks to the present invention, significant progress has been made in the implementation of accounts, as a fixed part of the documents began to print, and the variable - to enter by hand, which initiated the principles of unification of accounting documents.

<sup>3</sup> **Notes:** C - organizational and optimization stage of accounting development (transition to separate accounting of public expenditures and community funds); 1 - centralization of public expenditure management, formation of principles of personal responsibility for taxes (bureaucratization, the first censuses to control the number to establish taxpayers, the formation of financial departments), the emergence of treasurers and cashiers, the formation of economic management; 2 - keeping separate records of public expenditures and community funds (keeping books of records, requirements, orders, payment information); 3 - monetary reflection, strengthening of control over expenditures, the emergence of invoices (especially in production, where colored tags are used - a prototype of signal documents), the principle of mandatory documentation, the first balance of the state economy and state accounting books with independent socio-economic force; 4 - separation of the management system from the persons who carried out the account and emergence of the hired managers responsible for payment of taxes, primitivism of approaches to accounting maintenance of optimization of activity (including social and industrial), low level of interrelation between the state incomes and means of communities.

The industrial revolution (XVII-XIX centuries) had a significant impact on the system of public financial management. After it, management becomes a separate branch of knowledge, its methods are developed, experience and ability to manage are disseminated. It was the cause of the seventh managerial revolution (industrial (XVII-XVIII centuries)), which led to the development of an accounting system focused on optimizing the use of resources.

In this context, rapid progress in the development of accounting methodology can be traced in market economies. It is worth emphasizing that the emphasis is shifting to the theoretical plane, numerous scientific publications appear, new economic theories are developed, which are then actively used in practice due to the impact on efficiency. There are objective grounds for distinguishing between accounting methodology as a science and practice.

The combination of theory and practice allows to raise the accounting system to a qualitatively higher level. At the same time, discussions on the legitimacy of justifying the development and expansion of accounting functions are intensifying. A simple way to address the issues is to take into account the objective processes that take place: the introduction into practice of accounting methods and techniques that significantly expand its capabilities, including to improve efficiency not only at the level of individual business entities but also society in in general; intensification of the use of accounting information for forecasting purposes.

The eighth managerial revolution (scientific and technical (late XIX - early XX century)). Led to the formation of management on a scientific basis, which, in turn, gave impetus to the intensification of research in the field of accounting. The result is the development of forms of accounting and improving the procedure for its maintenance, including in institutions that were maintained at the expense of the budget. At this time there are accounting schools, the science of accounting is developing, the emphasis is on improving its theory (Figure 4).

Further historical development of accounting is associated with the need and expansion of the use of optimization and analytical methods and techniques. Globalization processes in the world economy, the orientation of the national accounting system to the principles formed by international accounting standards, limited financial and logistical support, as well as continuous informatization inherent in the modern communications system, allows you to quickly manage the use of resources. The result of the ninth administrative revolution

(bureaucratic (late nineteenth - early twentieth century)) was the strengthening of the hierarchical structure of government, which led to the centralization of accounting, strengthening its regulation and subordination to the interests of the state.

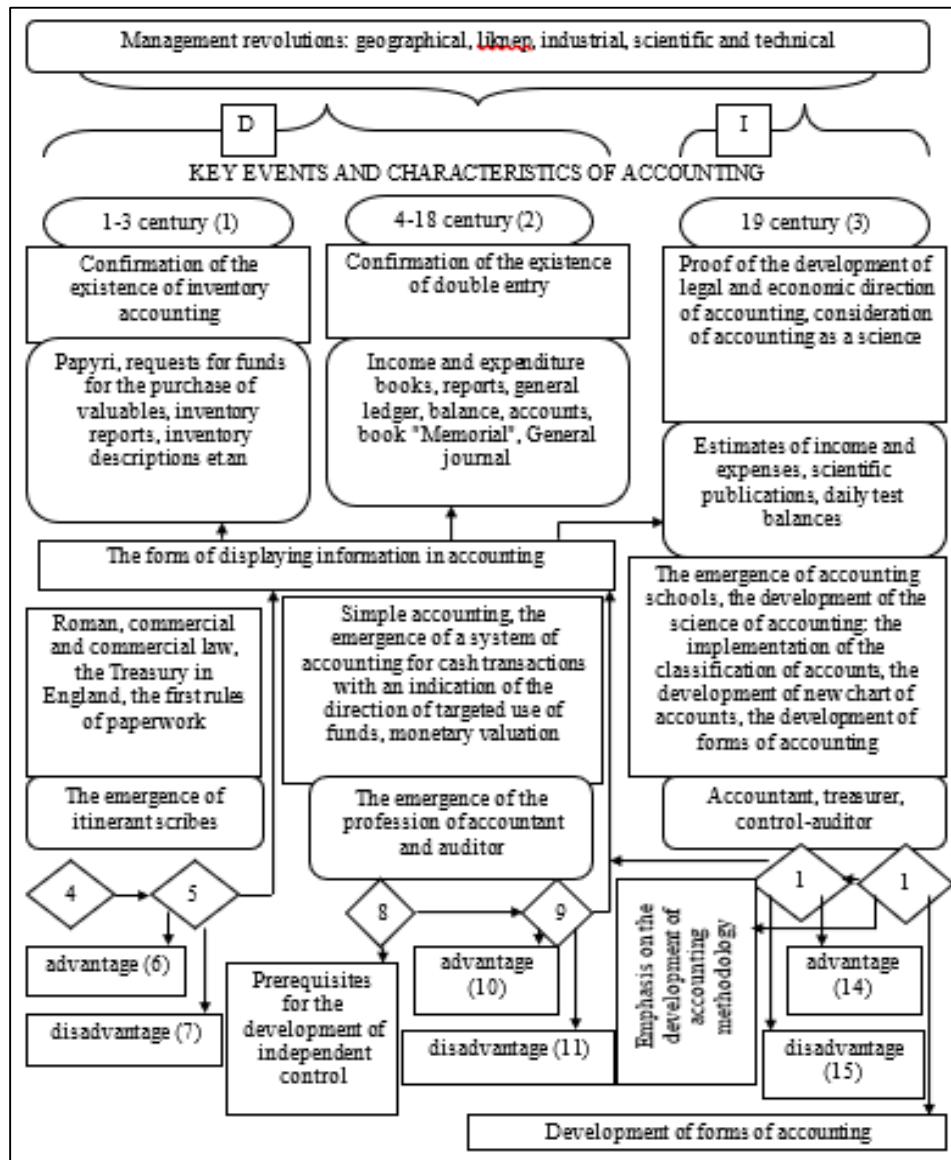


Figure 4: Characteristics of accounting in the period of the fifth, sixth, seventh and eighth administrative revolutions<sup>4</sup>

<sup>4</sup> **Notes:** D - stage of development of accounting as a professional activity; I - stage of development of methodology and forms of accounting (XIX century); 1 - the period of detailing accounting, accounting with written records, the emergence of markings, Arabic numerals, accounting with labels, the emergence of the first classification of the property of monastic farms in Western Europe; 2 - the period of development of the double entry system, the emergence of printed accounting forms of documentation; 3 - the period of development of management principles based on motivation, change of attitude to the management of the organization - the transition from income and political power, to strengthening material incentives and improving social conditions, the period of socialist account and its automation; 4 - management was focused on property and funds, there were prerequisites for the development of lending operations; 5 - coordination of all business transactions with the relevant documentary permission; 6 - linear records, the possibility of a chess form of accounting, which provided better control of funds, the emergence of traveling scribes, who for a fee compiled reports, the emergence of the principle of accuracy, strengthening control, the first rules of paperwork, the beginning of double entry; 7 - records did not give absolute accuracy of accounting, itinerant scribes provided periodicity of accounting, but for the needs of management of means and material values systematics is required; 8 - management requires independent control, as the reports the preparation of guest

Accounting is aimed at meeting the requests of higher authorities and monitoring the use of public funds and property. Rationing is becoming one of the main characteristics of the objects of accounting. As a result of the development of technical means there is a gradual automation of accounting, and the desire to unify it and create its foundations through the approval of uniform forms of accounting documentation for different entities provides a summary of data by industry and at the national level.

Planning, characteristic of the socialist type of economy, had a decisive influence on the accounting. The relationship between planned and actual indicators made it possible to address control issues, as planned targets were the norm to accounting.

Accordingly, for the nineteenth century. characteristic intensification of scientific research in the field of accounting, as well as the development of accounting scientific schools, including those focused on the development of the principles of the normative method of accounting.

At the same time, the purpose of accounting remained unchanged and was to generate information and report to higher authorities. At the end of the XX - beginning of the XXI century (Figure 5) accounted for the tenth management revolution (information), which introduced the use of expert systems, virtual organizations, the widespread use of electronic communications, the emergence of new organizational forms and management technologies.

In the XXI century there are objective prerequisites for intensifying the use of optimization tools. The actualization of this area of accounting tasks is associated with increased competition in the budget sphere and further systemic transformation of the management of entities operating at the expense of budget funds. The latter is no longer associated with another management revolution, but with the reform of the budget sector, qualitative changes in the forms, levels and methods of providing services by budgetary institutions.

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accountants, who due to the periodicity of accounting functions and the lack of a comprehensive and consistent approach may make mistakes; 9 - the emergence of the institute of controllers-auditors and the principles of audit (control) activities by special persons; 10 - double entry (after the XIII century), the target direction of funds, a mirror image of the facts of economic life, the separation of synthetic and analytical accounts, the cost basis of the reflection of objects, which allowed their comparison; 11 - accounting is not consolidated into one system, is conducted in different accounting units, which does not allow to compare objects, lack of result accounts, determination of balances is possible only by inventory, there are no rules for calculating benchmarks; 12 - centralization of management, formation of the Ministry of Finance, formation of the general management of the account; 13 - centralization of management; 14 - scientific approach to accounting, labor rationing, centralization of accounting, dissemination of ideas of double-entry bookkeeping, improvement of classification of accounts and accounting registers, development of chart of accounts, creation of new forms of accounting; 15 - diversity of approaches to the formulation of the principles of accounting.

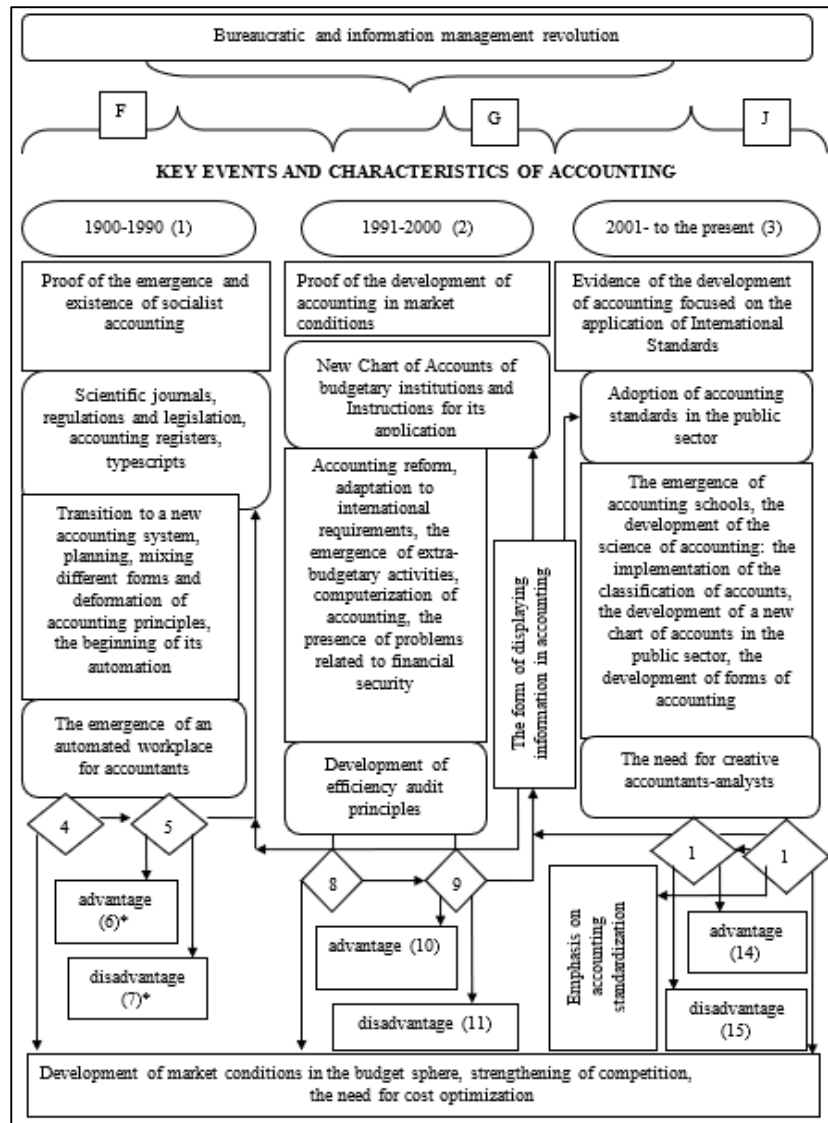


Figure 5: Characteristic features of accounting in the period ninth and tenth administrative revolutions<sup>5</sup>

<sup>5</sup> **Notes to Figure 5:** F - methodological stage of accounting development with increasing bureaucratization; G - scientific stage of accounting development; J - stage of standardization, unification and cloud-computerization of accounting; \* - in detail the advantages and disadvantages are defined in table 2; 1 - all entities operate on the basis of state, collective and communal property; 2 - the period of organization of accounting of independent Ukraine; 3 - development of market principles in the activities of budgetary institutions; 4 - centralization of management, the emergence of the Ministry of Finance, the formation of general management accounting; central governing bodies and their subordinate structural units - managers of funds (main); 5 - scientific approach to accounting, labor rationing, establishing personal responsibility for violations; 6 - development of normative approaches in accounting, strict regulation of expenditure norms and control over the implementation of plans, centralization of accounting; 7 - centralization and strict regulation of accounting, which led to the oppression of the initiative in socialist accounting, the use of several chart of accounts in the period of independence; 8 - development of the Treasury Department and control of budget funds; 9 - accounting with the use of computer equipment (exceptions are small budget institutions); 10 - The chart of accounts of budgetary institutions is as close as possible to the chart of accounts of industrial enterprises and adapted to international requirements, the revival of classical principles; 11 - mixing of old approaches to accounting with new (market), the lack of a common accounting methodology in budgetary institutions in market conditions; 12 - systemic transformation of management, aimed at ensuring the effectiveness of control over the expenditures of budgetary institutions through the introduction of treasury services; 13 - in accordance with the current requirements, if the budget institution has an accounting department, its head (chief accountant) must have a complete higher education in the relevant professional field and meet the following requirements: experience of at least 5 years and experience in management positions at least less than 3 years - provided that other budgetary institutions are subordinated to this budgetary institution; work experience in the specialty of at least 3 years and experience in management positions of at least 2 years - provided that other budgetary institutions are not subordinated to this budgetary institution. If the accounting service is not

**Table 2: Advantages and disadvantages of the accounting system of post-Soviet countries and countries with market economies**

Indicator / feature	Accounting system of socialist countries	Advantage / disadvantage	Accounting system of market economies	Advantage / disadvantage
Management system	Centralized. Acute hierarchy of management structure	Comparability of indicators, single Chart of Accounts / Lack of independence. Non-cybernetics of the accounting system. The growing influence of wrong decisions from top to bottom and the distortion of information from bottom to top. Too much centralization. Development of arbitrariness and excess of official authority	Democratic	Ability to form reasonable for a particular entity approaches to the composition and content of accounting indicators / difficulties for comparison
Content and purpose of accounting	Subordination to the fullest provision of satisfaction of constantly growing social needs. Control over the use of state funds and property (means of public control)	Representing the interests of society and citizens / Difficulties in ensuring the implementation of individual requests. Lack of the right of initiative	Satisfaction of management requests	Ensuring proper management of public and municipal funds / variety of approaches
Planning	Displays the processes of the planned activity	Allows you to monitor deviations and ensure the achievement of the planned tasks of budgetary institutions / No disruptions (risks)	Market approaches	Ensuring the competitiveness of entities, focusing on market conditions / (many domestic entities do not carry out strategic planning at all)
Representation of interests	Public	Unity of norms and standards for all / Problems of solving individual requests.	States, municipalities and citizens	National and individual interests, the ability of municipalities to make their own decisions for citizens of the local community / lack of equal opportunities for all citizens
Level of access to information	The data is available to all managers	Sharing and privacy / Difficulty of operational correction of plans	Basic data are available to the general public, but there is data for internal use	Availability of public control / closure of confidential information to the general public
The specifics of the property of social actors	State + a number of entities of social importance were on the balance of industrial enterprises (kindergartens, hospitals, health facilities, etc.)	Partial transfer of the burden of social issues to the subjects of the production sphere / The complexity of the redistribution of resources on the cost items and their justification	State and municipal	Extensive rights of local authorities in resolving issues of the territorial community, including in relation to local taxes and fees / establishing directions of use of funds by local authorities
Approaches to regulation	The only approach, rules and forms of accounting	Clarity, clarity and reliability of credentials / Corruption, fear of management and lack of initiative	The presence of the influence of public Accounting organizations	Freedom in choosing the form of accounting / problematic formation of statistical indicators

Source: Formed by the authors on the basis of generalization of current accounting practice

formed in the budgetary institution, a specialist is hired who must meet the following requirements: higher education (master's degree, specialist) and work experience in the specialty for at least 3 years; bachelor's or junior specialist's education and work experience in the specialty for at least 5 years; 14 - approximation of accounting to international requirements, development of research and implementation of the practice of national accounting standards (based on the basic principles and principles of international), the beginning of the application of the principle of accrual, the formation of principles for calculating services; 15 - lack of a unified approach to the calculation of paid services, maladaptation of accounting to market conditions (the system does not provide the opportunity to choose alternative activities and improve its results).



The external manifestation of the systemic transformation of management has affected the sources of financial support for the provision of services, the organization of accounting for transactions related to the expenditure of budget funds, the level of autonomy of the subjects of the budget sphere, and so.

**3.2. Is there a connection between the transformation of the management system and the development of the Accounting system?**

Studies show that the stages of development of accounting are associated with the transformation of the management system of business entities, which changes its objectives and principles. On this basis, 7 stages of the historical development of accounting in budgetary institutions are identified (Figure 6).

1 stage	to the V century BC	religious-commercial
2 stage	IV - II century BC	socially oriented with signs of strengthening state regulation and control
3 stage	I century BC. - I century AD.	organizational-optimization (transition to separate accounting of public expenditures and community funds)
4 stage	II – XVIII century	formation of accounting as a professional activity
5 stage	XIX century	methodological with increasing bureaucratization
6 stage	XX century	scientific
7 stage	XXI century	standardization, unification and cloud computerization of accounting

Figure 6: Stages of development of accounting in the field of public sectors on the basis of the impact of management system requests

Unification of accounting nowadays is carried out on the basis of introduction of requirements of the international standards. The approval on their basis of the National provisions (standards) of accounting in the public sector is aimed not only at unifying approaches to accounting, but also involves a change in the philosophy of budget management. A special role in this context is played by the approved Chart of Accounts in the public sector, developed on the basis of harmonization with the budget classification of expenditures.

The emphasis on building a clear vertical for the reflection of budget funds in the accounts indicates the desire to strengthen control over their formation and use. From the standpoint of demonopolization of public sector management, such an approach by the state is quite logical. Thus, the periodization of the development of accounting on the basis of the

impact of management system requests indicates a close relationship between changes in accounting characteristics depending on the transformational changes in management structures. From this follows the conclusion about the expediency of taking into account the systemic transformation of the management of budgetary institutions in the development of the principles of modernization of accounting.

Thus, it should be emphasized that the results of the genesis of accounting is a necessary condition for the development of an improved concept, which includes solving problems of theory, organization and methodology. Our research results indicate the connection between the transformation of management and the development of the accounting system.

The characteristics of accounting, established as a result of the analysis of historical, as well as economic foreign and domestic sources, indicate the presence of a close relationship between it and the systemic changes that have taken place in management.

## REFERENCES

- Diadiun, O., Petryk, O., Semenyshena, N., Khorunzhak, N., & Kalinichenko, S. (2020). Integrated Reporting in the Conditions of Sustainable Development: Institutionalization through Standardization. **Intellectual Economics**, 14(2), 67-86.  
DOI: <https://doi.org/10.13165/IE-20-14-2-02>.
- Fleischman, R. K., Funnel, W., & Walker, S. (2012). **Critical Histories of Accounting**. London: Rout ledge.
- Jäger, E. L. (2010). **Supplement zu den zwei Hauptwerken über die Geschichte der Buchhaltung, Nämlich zu 1. Lucas Paccioli und Simon Stevin, 2. Beiträge zur Geschichte der Doppelbuchhaltung** (German Edition). Publisher: Nabe Press.
- Kaplan, R. (1984). **The Evolution of Management Accounting**. *The Accounting Review*, 59(3), 390-418.
- Khomyn, P. Ya., & Zhuravel H. P. (2007). **Paradyhma y kontroverzy bukhhalterskoho obliku ta zvitnosti (sproba konsekventnoho analizu)**: monohr. Ternopil: Ekonomichna dumka. [in Ukrainian].
- Leyerer, C. (1919). **Theorie der Geschichte der Buchhaltung**. Brunn: M. Trill. Available: [http://www.buchen.ch/Geschichte\\_der\\_doppelten\\_Buchhaltung.pdf](http://www.buchen.ch/Geschichte_der_doppelten_Buchhaltung.pdf). Access: 12 August 2020.
- Logosha, R., Moroz, I., Semenyshena, N., & Chykurkova, A. (2019). Market Institute: research methodology in context of basic cognitive approaches. **Intellectual Economics**, 13(2), 172-194. DOI: <https://doi.org/10.13165/IE-19-13-2-09>.
- Marks, K. (1885). **Kapital**. T. 2. SPb. [in Russian].
- Novychkov, N. V. (2007). **Teoryia orhanyzatsyy**. Moskow: HUU. [in Russian].
- Omelchenko, M., & Zatoka, L. (1998). Vidobrazhennia kozatskoi doby v Ukraini na dilovykh paperakh. **Novi doslidzhennia pamiatok kozatskoi doby v Ukraini**, 7, 35-39. [in Ukrainian].

- Radchenko, O., Semenyshena, N., Sadovska, I., Nahirska, K., & Pokotylska, N. (2020). Foresight Development Strategy of the Financial Capacity: Comparative Study of the Ukrainian Agricultural Sector. **Engineering Economics**, 31(2), 178–187. DOI: <https://doi.org/10.5755/j01.ee.31.2.24340>
- Rasid, S. Z. A., Saruchi, S. A., & Tamin R. S. M. (2019). The eminence of the 4th industrial revolution: how it transformed management accountants. *Advances in Social Science. Education and Humanities Research*, 308, 186-189. Available: <https://www.atlantispress.com/proceedings/insyma-19/55915458>. Access: 15 August 2020.
- Razumkov Tsent (2020). **Hromadska dumka naseleattia shchodo reformy detsentralizatsii ta yii rezultativ**. Available: <https://razumkov.org.ua/napriamky/sotsiologichni-doslidzhennia/gromadska-dumka-naseleattia-shchodo-reformy-detsentralizatsii-ta-ii-rezultativ-serpen-2020r>. Access: 17 August 2020.
- Semenyshena, N., Khorunzhak, N., & Sadovska, I. (2020). Evaluation of the Adaptability of the Scientific Theories for the Development of Accounting Institute. **Intellectual Economics**, 14(1), 114-129. DOI: 10.13165/IE-20-14-1-07.
- Semenyshena, N., Khorunzhak, N., & Zadorozhnyi, Z.-M. (2020). The Institutionalization of Accounting: the Impact of National Standards on the Development of Economies. **Independent Journal of Management & Production**, 11(8), 695-711. DOI: 10.14807/ijmp.v11i8.1228.
- Semenyshena, N., Sysiuk, S., Shevchuk, K., Petruk, I., & Benko, I. (2020). Institutionalism in Accounting: a Requirement of the Times or a Mechanism of Social Pressure? **Independent Journal of Management & Production**, 11(9), 2516-2541. DOI: 10.14807/ijmp.v11i9.1440
- Slabchenko, M. E. (1925). **Orhanyzatsiia khoziaistva Ukrainy ot Khmelnychchyn do myrovoi voiny**. Ch. 1: Khoziaistvo Hetmanshchyny v XVII–VIII stoletyiakh. T. 4: Sostav i upravlenye hosudarstvennym khoziaistvom Hetmanshchyny XVII–XVIII vv. Odesa: Hos. yzd-vo Ukrainy. [in Ukrainian].
- Sokolov, Ya. V. (1995). **Bukhhalterskyi uchet: ot ystokov do nashykh dnei**. Moscow: Audyt. [in Russian].
- Svirko, S. V. (2006). **Bukhhalterskyi oblik u biudzhethnykh ustanovakh: metodolohiia ta orhanizatsiia**: monohr. Kyiv: KNEU. [in Ukrainian].