Accounting conceptual domain within Russian-language academia: agenda for a digital economy

Tatiana Odintsova¹

¹Institute of Finance, Economics and Management, Sevastopol State University, 14, Gogol str., Sevastopol, Russia

Abstract. Considerable changes in socio-economic environment determine a new informational landscape which is primarily concerned with updating of the accounting. Over the recent decades a notable decrease in the relevance of accounting has been generating a need for rethinking its outlines in both scientific and practical discourse. This article is motivated by theoretical heterogeneity in accounting theory, criticism inside and outside the accounting community and even doubts in the future of this profession. The paper examines the prospects and the drivers of the accounting conceptual domain, its conceptual field and methodology updating in the new economy. The ways current challenges may change research paradigms and pluralize approaches to the theoretical background and the object field of accounting in the Russian-language academia and practice are considered. Approaches to problem solving in the Russian-language and international scientific accounting research are compared and opportunities for accounting paradigm upgrading in the modern economy are explored. Keywords: accounting, paradigm, digital economy, information, methodology, subject field, approach.

1 Introduction

Information continues to gain more and more significance as one of the major drivers of human society and contemporary economy in particular. The evolution of digital economy, in its turn, is determined by the dominance of intangible value creation forces and the rapid transformation of information environment affecting the business models and the maintenance of ecosystems.

In attempts to define the changes in contemporary economy numerous definitions of the new types of economy have appeared in the last decades. These types include digital economy, post-industrial economy, service economy, knowledge economy, cognitive economy, common wealth economy and many more. Their definitions highlight specific features, overlapping partially and differing in some detail, and each of them can be interpreted both in broad and narrow meaning.
Considering the challenges of modern economy, I assume that all the information system for economic processes support will gradually and substantially change. In the first place, it concerns accounting with its functions of collecting, processing and providing economic information on the entities activity.

The advisability of accountancy updating through development of new theoretical positions and practical recommendations is determined by a number of new economic phenomena, namely: highlighting information as a key value-creating factor; focusing on non-financial as well as financial targets; developing intangible and hybrid forms of capital; modeling the global digital environment; virtualizing units of value for assets, liabilities and related transactions.

These drivers significantly affect the methodology, the principles, the procedures of accounting, the content and product characteristics, the internal structuring, the definition of objects being reflected in accounting, the criteria for their identification, taxonomy, metrics and descriptors. Thus, rethinking the place of accounting in a new information landscape, its content, methodological and conceptual frameworks in accordance with new informational requirements and digital capabilities have become quite relevant issues for research.

Besides, a decrease of accounting functionality and of the utility of reporting information to stakeholders has become quite apparent in recent decades. The relevance of accounting is reducing because of some particularities: conservatism, information retrospectivity, specifics of the outcomes, numerous restrictions, and as a result - the growing lag from the users’ needs. Accordingly, there is a probable risk for accounting in modern economy of dissolving in high-technological electronic environments, and getting “registrar” functional with low significance.

There are two tendencies producing a cause for concern. The first is associated with a decline in interest to traditional financial accounting information. Thus, the empirical studies of B. Lev (2018) reveals that over the past few decades, the correlation between stock prices and indicators calculated according to financial statements (e.g. profit, profitability, cash flow) has become much weaker. Investors decision making is based on calculation of extra indicators that assess the company’s ability to generate added value for financial resource providers, whether lenders or managers. Most of these indicators, although based on the thesaurus and the initial logic of financial reporting, are subject to multiple adjustments in order to avoid distortions immanent for accounting.

Also, this trend is being confirmed by the vigorous development of non-financial reporting. Particularly over the past 10 years, the number of regulatory tools defining requirements for sustainability reports went up more than 7 times. As of October, 2022 in the largest international database of reports on social responsibility www.corporateregister.com has 168,979 reports from 24,664 organizations; in the Russian Federation, 1314 reports were registered in the National Register of Non-Financial Reports, including: environmental reports – 106, social reports – 379, reports on sustainable development – 493, integrated reports – 336.

The second negative trend causing anxiety of pro and academic community is doubts arising about further demand for the accounting profession. It could be confirmed by the notorious mention of accounting in the list of “dying out” professions. Also, to a certain extent a growing concentration of IT specialists in the profession having basic financial disciplines knowledge, but not profile accountants can be considered symptomatic.

This has led to numerous studies revising various points of accounting theories and paradigms, as well as its significance in creation of the present information landscape. The practical level of studies is generally aimed at enhancing the relevance of reporting information and upgrading accounting technologies.
2 Materials and Methods

This paper is aimed at considering the prospects and directions of updating the conceptual domain of accounting, as well as of its subject-matter and methodology in the dynamic environment of the contemporary economy. It examines the ways current invocations might change research paradigms and pluralize approaches to the theoretical background and the object field of accounting in the Russian-language academia and practice.

Initially this study had an intention to analyze the impact of modern economy to the accounting system as a whole, to consider the outlooks and to argue changes in its subject, boundaries, underpinning paradigms and approaches, but as the work progressed, it became obvious that a comparative analysis of the Russian-language and international scientific approaches and theories is necessary for making this analysis. This idea appears acceptable due to the detected difference in goals, subjects, reference back and semantic constructions of Russian- and English-speaking studies.

The paper is conceptual and uses the methods of logical and expert analysis to existing theoretical ideas and explorations. As far as the study is more theoretical, it is based on the methods of general scientific cognition, analysis and synthesis, comparison, assessment of cause-and-effect relationships. It was examined a row of scientific papers in Russian-language and English-language academic literature, were compared main approaches and agendas of profession growth, and the relevant differences were analyzed.

3 Results

Accounting updating, according to the requirements of the new economy, has recently become a subject of scholars and practicians active discussion. Furthermore, the larger part of the authors admits the necessity for transformations, involving changes in accounting content, qualitative characteristics and design of reporting, development of principles, methods and concepts, up to a changing an accounting paradigm.

Looking for a solution primarily it is reasonable to build a conceptual model, which includes a set of theoretical constructions clarifying changes in logic, structure and principles of the accounting system in the modern economy.

I should say that new accounting conceptual model implies an integrated approach with a number of interrelated elements performance, which, in particular, are presented in Figure 1.

Analysis of publications on accounting in the Russian-language and Ukrainian-language scholarly and practical writings highlights a number of specific features in determining its subject field and boundaries, as an academic discipline. First of all, this is due to certain dissemblance in the vision of the accounting theory between representatives of the post-Soviet school and scientific directions in world practice and largely represented in English-speaking sources. Presently, the national accounting systems of Russia and other post-Soviet states are being updated more or less sprightly through the gradual IFRS implementation and the introduction of rules, principles and standards mostly derived from the Anglo-American accounting model. At the same time, as Legenchyuk (2010) notes, the theoretical foundations of accounting science largely remain the same, formed in the classical “Soviet” theory, and this entails artificiality and insufficient performance in the harmonization process.
For Kovalyov, accounting theory was normally associated by Russian (Soviet) scientists mostly with the accounting method and this idea does not include such significant methodological aspects of accounting, as its financial, institutional, social and communicative nature, underpinnings by neoclassical theory, behaviorism, agency theory and others. Obviously even a formal comparison of these treatments with the represented ones an Anglo-American school speaks about a dramatic, one might say, catastrophic difference in understanding what its content (Kovalyov, 2013).

At the same time, there is a notable tendency in foreign scientific writings of volumizing accounting theories and paradigms studies, increasingly question-open and discussable. For Lopez “based on multiple doctrinal thoughts, research in accounting seeks to understand social phenomena towards its harmonization and standardization. The developments in organizations have required from academia additional insights towards economic value creation.” (2015: 15) A review of the latest academic English-language works has highlighted a number of important routs. Foremost, this is a shift from mono-paradigmal to multi-paradigmal vision looking for compromises and synthesized approaches. For Lukka (2010) genuine acceptance of heterogeneity could have many positive consequences for accounting research, whereas monoparadigmatic approach in accounting theory being worrisome, causing the closed nature and insufficient breadth of research within a single paradigm. The notable dominance of the functionalist paradigm has led to increasing conformity and considerable homogeneity in accounting research (Lukka, 2010). Baker and Bettner (1997) argue the necessity of development interpretive and critical research virtually absent from mainstream academic accounting journals and increasing diversity in accounting research community should be viewed as a good thing. Analyzing distinctions between Mainstream, Interpretive and Critical Research, Chua (1986) indicates that by changing the set of assumptions, fundamentally different and potentially rich research insights are obtained. To a large extent this also applies to management accounting. According to Lukka (2010), Malmi (2010), Modell (2010), the dominance of one paradigm in accounting research clustering as well as paradigmatic borderlines have negatory implications for the management accounting academy. Regarding in particular management accounting research this idea was underlined in the paper of van der Meer-Kooistra and Vosselman (2012) who advocated theoretical pluralism and paradigm diversity matching a practical relevance of accounting knowledge.

**Fig. 1.** Main steps and elements of accounting conceptual model in the modern economy updating.
While developing current accounting theory, researchers cover not only financial and management accounting, but also other types of accounting and interrelated business practices, such as Public Accounting, Auditing, Internal Control, Corporate Governance, Management Control, Performance Analysis and so on. E.g. Lopez (2015), by structuring research approaches and the perspectives of accounting paradigms development on six basic topics, defines the transdisciplinary scope of application of the considered theories in adjacent business-practices. However, unlike Russian- in English-language accounting research are not so highly represented attempts for accounting dividing and diversity of suggested Accounting types.

In Anglo-American academy for the accounting theories comprehension is initially inherent pluralistic treatment for their systematics with different dividing key criteria. Thus, Hendriksen and Van Breda (1997) make it possible to regard theory from tax, legitimacy, ethical, economical, behavioral and structural approaches. Among those named in foreign academia there are practical, inductive, deductive, ethical, sociological, axiomatic, economic, situational, behavioral, predictive, eclectic, management models, decision makers, social wealth theories’ approaches. Feasible discourse that underlies theories classification is the accounting insight as a language with the appropriate semantics (content), syntactics (logical structure) and pragmatics (influence) approach. Volkova (2018), views accounting as a lingual system which could be described in two dimensions: semiotic (pattern of signs) and communicative (connective environment). The variety of the accounting theory constructions can also be associated with a way of arguing the principles determining accounting practice: from general to specific (deductive approach) or getting generalizations from private practice based on empirics (inductive approach) as well as guidance for creating theoretical knowledge – in prescriptive (Normative approach) or descriptive (Positive approach) manner.

In the context of this diversity it is advisable to assess further accounting development trends, through connecting theoretical views and treatments existing in Russian- and English-language academia.

The key direction in accounting development is apparently an expansion of its borders and subject field. I fully support idea that considering the conceptual space of accounting, one can find the special features of that picture of images and meanings, which is embedded in its understanding by society. And it is precisely the narrowness of the concept that leads to the limited scope of the subject field and underestimation of the accounting in total. It seems sensible to pay some attention to the English-language academic thought, since for this school is inherent the accounting vision as a socio-economic practice, being demanded and market-subjected, which develops towards to the public requirements via harmonization with the trends of economic, social and human progress. So, the Normative theory of accounting, being purely prescriptive, as could be illustrated by IFRS (as well as any other standards and regulations), at a certain moment, gave way to the very concentration of empiricism descriptive Positive theory, observing the reactions of the market, business, government and other stakeholders to accounting information. The fact that the development of accounting is influenced by the behavioral aspects and expectations of the “players” looks quite revolutionary for the domestic accounting theory. However, nowadays, at a new stage of development, takes place a Normative-Positive synthesis, accepting the advantages of both approaches, which have become obvious over a long period of their approbation.

The conceptual domain of accounting covers not only the elements of the cumulative reproduction process, the asset flows and relations about their distribution, but also much wide related aspects of activity. It can be the interests of different groups and institutions as stakeholders, social practices, and relationships with nature, power, territorial entities, market forces and public groups. Accounting could touch temporal and probabilistic drivers of value creation, try to identify assets and activities cannot be estimated in monetary form -
anthropogenic influences, social responsibility, contribution to sustainable social growth and others. If one deviates from the traditional understanding of accounting as a purely supplier of financial information of a retrospective nature, one can find several of its discursive fields – the functional support for management decisions, the language that allows you to describe a variety of social and political practices, tools for influencing markets and society and others.

The English-language academic accounting research described by different levels of problematic vision rooted on appropriate theory (paradigm), which was taken as a focal.

As Lopez (2014) indicates, theories development concentrated on two dimensions – ontological (associated to the objectivity/subjectivity level) and epistemological (as a way to acquire knowledge). Ontological insight is associated with the human beliefs about social and natural world; epistemological view is linked with the way of its cognition. While examining academic demarcation and prospective of accounting, Richardson (2012), Volkova (2018) advocates three approaches to a paradigm taxonomy, as epistemological (the knowledge getting manner and the place of this discipline relative to others), ontological (the origin of an object studied) and methodological (methods of its contemplation).

The most wide-spread accounting paradigms taxonomy around epistemological axis (Burrell, Morgan, 1979) includes Functionalist paradigm (considering also as a Mainstream, or Positive Accounting Theory), Interpretive paradigm (in some sources it equates or corresponds to Constructive Approach) and Critical paradigm. By Lukka (2010) multiparadigmatic vision of accounting discipline to a large extent had been inspired by Burrell and Morgan (1979) framework, where an Interpretive and Critical paradigms were offered as alternatives to the Mainstream one. This outlook can be considered proper if draw on the essence of epistemology. Functionalist approach tends to explain objective social phenomena, taken strictly external to the investigator, the Interpretive one takes for a basis subjective evaluations and interpretations of researcher, interacting with the subject. Interpretive paradigm assumes the world can be socially constructed through this interaction. Critical perspective acknowledges that reality can be studied only considering contradictions and conflicts in society. As Chua (1986) puts it: “Reality as a whole, as well as each particular part, is understood as developing out of the earlier stage of its existence and evolving into something else” Meer-Kooistra, Vosselman (2016) added that human potentiality is restricted by systems of dominations, either of an ideological or a repressive nature.

From epistemological outlook Sekaran and Bougie (2013) have defined an alternative research classification, including Positivism, Constructionism, Critical realism and Pragmatism. While the positivist approach assumes possibility of reality prediction and generalization of empirical experience without actor involving (Chua, 1986; Sekaran, Bougie, 2013) constructionist treatment consider the reality being mentally constructed, so the knowledge creation is based on interpretation of the social practices. According critical realism existing objectivity cannot be measured reliably, and the actors anyway biased in interpretation and understanding of phenomena. Pragmatic approach appears as a pluralistic and practical-oriented with eclectic methodology and objectives understanding (Sekaran, Bougie, 2013; Lopez, 2015).

Whereas epistemological classification of Volkova fully matches paradigms taxonomy of Lukka and Modell (2010), the methodological one contains Normative, Positive and Constructive paradigms, segregated in dependence of being a researcher’s observation and action result. By Volkova (2018), ontological dimension operates with the set of images, notions and their interrelations in a subject field, thereby forming an object nature. Thus she derives as the most popular two ontological paradigms: Financial with an emphasis on financial information providing, and Managerial for decision-making support in all socio-economic practices (Myers et al., 2016). As well nowadays are moving ahead totally diverse concepts of accounting essence. For instance, accounting as a social practice, a way for interacting and representation of social reality (Horvat, Korosec, 2015) presumes that it might
cover such objects as accountability and transparency in power structures, fair resource allocation and similar. Being treated as a socioeconomic institute in Institutional paradigm, accounting implies reaction on the challenges of different actors, organizations and institutions, embracing their influence on praxis and outcomes multiplicity (Strathern, 2000). Regarding to an ontological paradigm, it becomes reasonable trans-disciplinary approach capturing financial, organizational, social, institutional, lingual, power and other practices.

Studies of accounting paradigms are based on different signs of their classification. In particular, the first, who was adapted Kuhn’s theory to accounting, Wells (1976) identifies seven paradigms — anthropological, conjectural, eventual, procedural, idealized, informational and behavioral. In Russian-language academic writings more popular technical approach to a paradigm’s acceptance. Kovalyov (2013) pointed to modern accounting research ideas of six paradigms: (10) inductive-anthropological; (2) deductive of ideal income; (3) decision theory; (4) capital market; (5) behavioral; (6) informational economic. Ya. Sokolov (1996), one of the first scholars who had introduced the concept of “paradigm” into the Russian accounting theory, examines three types of them: simple (unigraphic), cameral and double (digraphic) accounting. As it had been noted by Zuga (2010) the accounting paradigms could be based on a methodological or essential approach. The methodological treatment assumes paradigms dividing agree by a key accounting method such as: unigraphic, cameral and digraphic. The essential approach supposes existing of economic and legal paradigms regarding the appropriate interpretation of accounting nature. Combining these features, the author identifies six paradigms systematized in a matrix manner and defines the digraphic economic paradigm as the dominant one for nowadays accounting. According to Volkova (2018), these paradigms correspond to the functionalist positive theoretical approach, but not sufficiently response the goals of accounting academic evolution. And even more so, they do not facilitate the accounting subject field expansion in the informational economics.

In contemporary Russian academy the acting accounting paradigm can be defined as digraphic economic and dynamic via different taxonomies. Considering the fact that double entry technically still underlies the current paradigm and has not exhausted itself as its methodological basis, for the time being it is more reasonable to speak not for paradigm change, but for research approaches and methods development within the framework of the existing digraphic paradigm. There were some attempts to constitute a triple, quadruple, multidimensional accounting entry but they appear to be more associated with the conjunction of economic fact and its specific characteristics, whereas their system-forming factor still remains dual, with its basic logic “increase - decrease” and balancing through the category of equity. Therefore, relying on a methodological approach it seems some premature to speak about a paradigm shift.

However, it should be noted that the digraphic paradigm is systemic only for financial accounting, for other accounting types it can be considered even as a development deterrent. Moreover, the conservatism of financial accounting (a money measurer solely, information “ex post”, system isolation) surely initiates a new knowledge search and movement to the fresh paradigm. As it was noted by Kovalyov (2013), a radical opinion of possible emergence of the new paradigm not based on a double-entry can be justified. It is connected with a fact, that many drivers of economic entity development (e.g. organizational structure, contract and incentives system, personal quality and specifics, corporative culture and others) cannot be reflected adequately through traditional double-entry.

Obviously in the conditions of the modern economy, a number of prerequisites for a new paradigm search arise. Foremost they include a growing dissatisfaction of the practical and scientific community about the existing accounting paradigm, because of a weak correspondence to the required functionality, informational power and cross-disciplinary.
The accounting outcomes should be changed in a way as to provide users with indicators and data of real interest to them, and create a fledged information environment for socio-economic processes managing. We consider accounting information should be both financial, and non-financial, embrace both past and future events, reflect both internal processes and the state of the external environment. The content expansion through non-financial parameters of the company covering social responsibility, environmental safety of business, organizational, innovative, human, reputation capital, strategy and quality of management is of particular importance. Since reporting could be treated as merchandise, its providing might rely on a client-oriented approach to ensure product attractiveness in respect the expectations of consumers. It means not only propriety, perception convenience and interpretation facilities of reporting data. It can underline some firm's winning points such as social and human priorities, responsibility of business, indicators of reasonable strategy, value creation abilities and others for image-making in business and social hubs as well.

We consider that it is expedient to move away from the stereotypes in the accounting methods and their comprehension as something static and immutable; otherwise accounting increasingly will fall behind of demands and abilities of the digital economy. While maintaining the methodological core of accounting, it is important to develop and expand the range of methods used, thereby ensuring their adequacy to the existing and further accounting tasks. As it was rightly noted by Chumachenko (1997), that accounting aims to describe, explain, foresee the facts and at the same time direct our actions. In this it relies on four types of models, specifically descriptive, explanatory, prognostic, and decision-making.

Changes in accounting theoretical base and content has an impact on evolution of all the main method elements. Hence, a multilateral development of the accounting methodological ground through the methods updating of both accounting and related management activities, and ensuring accordance of its information product to the actual requests is expedient. Digital technologies could provide multilateral development of accounting methods and procedures.

Accounting objects in the contemporary economy are also undergoing a substantial change. Firstly, this is due to the gradual expansion of the range of indicators that characterize for reporting users not only economic efficiency, but also environmental safety, social responsibility of business, strategy and quality of corporate governance, presence of organizational, innovative, human and reputation capital, and other non-financial facilities that provide the basis for value creation.

Secondly, the range of objects is expanding with new, hybrid and modifiable forms of assets, liabilities and capital, e.g.: digital assets, digital and cryptocurrency; digital analogues of real values and obligations (tokens); smart assets and smart contracts, instruments crowdfunding and crowd investing, virtual monetary and non-monetary assets and property rights.

Their reflection in accounting requires not only existing methods supplement, but formation of new objects taxonomy, criteria for their recognition, metrics, descriptors and principles of reflection in the data system.

Furthermore, internal structuring of accounting and allocation of its existing or newly born types which are being objectively demanded become essential. There are obvious trends in this area, such as the convergence of existing types of accounting and attempts to segregate new ones, such as strategic, adaptive, multi-purpose, creative, intellectual, etc. The convergence of external and internal accounting will allow to present in corporate reporting information on development strategy, economic value added creating in the context of business segments and making factors, and the management system performance. Of an interest are also the ideas of separation accounting types forming their peculiar information systems, in particular strategic, social, actuarial, behavioral accounting, and others. The expediency of their allocation is debatable, but definitely it deserves consideration within upcoming changes for accounting paradigm and conceptual frameworks.
4 Discussion

The subject for discussion is that in a modern economy, in order to maintain its relevance and demand for the product being produced, accounting should be more clearly positioned as an element of the system for receiving, processing and transmitting economic information. Otherwise, it is undergo to a significant risk of “dissolving” in modern electronic information systems, which are dynamically developing and expanding the scope of application. To do this, it is necessary to imagine clearly the place, role and functionality of accounting in the ecosystem. In this context, there are relevant further studies, in particular:

– study of problems, socio-economic prerequisites and constraints on the accounting development as an “information provider”;
– estimation of the necessity and identification the main directions of accounting updating, considering its theoretical background and possibility of accounting paradigm changing;
– design of new theoretical and methodological approaches to the accounting concept construction in the actual conditions;
– study of the digital technologies influence on the accounting methodology, clarification the possibilities of its expansion and streamlining;
– identification a range of accounting objects in new economy, clarification for their recognition criteria, metrics and taxonomy;
– picturing of the internal structure by types (subsystems) of accounting, the definition of criteria for their recognition, as well as directions for the development;
– determination of the reporting quality and substantive features, finding of the progress possibilities for integrated corporate reporting to create a sustainable development environment;
– proposals for the basic regulatory and legal documents modernization concerning as mandatory, as indicative (soft law) documents, recommendations for the chart of accounts and financial statements updating;
– identifying the ways for the accounting infrastructure upgrade, in particular of personnel and educational programs, automated platforms for generating, exchanging, using and security of the economic information.

5 Conclusion

In this paper an attempt was made to define the ways a research approach to the theoretical background and subject field of accounting in the Russian-language academia can be diversified in accordance with the main world-spread ideas.

A conceptual accounting model, which assumes an integrated approach by the implementation of number interrelated elements was proposed. It includes: identifying the problems of accounting placement in a modern informational landscape; assessment of prerequisites and possibility for the accounting paradigm change; modernization of the accounting methodology, including the emergence of new digital and social facilities; development of new accounting types; reporting the content and presentation mode improvement; updating the basic legal documents and creating a relevant infrastructure (personnel, educational and informational platforms).

It has been revealed that in the conditions of the information economy, a number of prerequisites arise for the formation of a new accounting paradigm. However, the ideas, which are defined in the scientific literature as new accounting paradigms, are mostly concepts, research approaches, and developments of various types accounting.

Key factors of digital technologies influence on the accounting methodology were defined, a possibility of their expansion and modernization was analyzed. The main trends in
the accounting objects evolution in the context of developing hybrid and intangible capital forms, virtualization of monetary and non-monetary units of value, of non-financial target characteristics of economic entities expansion were defined. They can be progressed for further recognition and evaluation of new accounting objects. The necessity of the accounting content expanding by non-financial parameters, reflecting internal processes and relations with the environment, as social responsibility, ecosafety, organizational, innovative, human, reputation capital, strategy and quality of management was substantiated.

References

4. N. Chumachenko, Accounting: past, present ... future. World of accounting (1997)
7. V. Kovalev, Bulletin of Saint-Petersburg University 2, 90-112 (2013)
10. I.T. Lopes, Contaduría y Administración 60(S1), 9-30 (2015)
18. Ya. Sokolov, Accounting: from the beginnings to the present day (Audit, UNITI, Moscow, 1996)