# THE RELATIONSHIP BETWEEN LEARNERS' MULTIPLE INTELLIGENCES AND SUCCESS IN LEARNING A SECOND LANGUAGE

## *A RELAÇÃO ENTRE AS MÚLTIPLAS INTELIGÊNCIAS DOS APRENDIZES E O SUCESSO NA APRENDIZAGEM DE UMA SEGUNDA LÍNGUA*

## *LA RELACIÓN ENTRE LAS MÚLTIPLES INTELIGENCIAS DE LOS ESTUDIANTES Y EL ÉXITO EN EL APRENDIZAJE DE UNA SEGUNDA LENGUA*

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**ABSTRACT:** One of the essential human needs that can guarantee success in various areas of life is intelligence. Due to the importance of this issue, the researcher of multiple intelligence theory has selected Howard Gardner as one of the main theories of intelligence as research and has studied its role in the success of second language learning and two crucial factors of language (grammar and writing) at the academic level. The study aims to analyze the role of learners' multiple intelligences in learning a second language. To do so, 120 students of Russian Universities participated in this study. Their selection was random. The research is correlational and descriptive, and inferential statistics, independent sample t-test and one-way analysis of variance (ANOVA), and SPSS software were used to analyze the data. The results showed a positive and significant relationship between some components of intelligence and second language learning.

**KEYWORDS:** Multiple intelligence. Second language learning. Students. Language.

***RESUMO:*** *Uma das necessidades humanas essenciais que podem garantir o sucesso em várias áreas da vida é a inteligência. Devido à importância desta questão, o pesquisador da teoria da inteligência múltipla selecionou Howard Gardner como uma das principais teorias da inteligência como pesquisa e estudou seu papel no sucesso da aprendizagem de uma segunda língua e dois fatores cruciais da linguagem (gramática e escrita ) a nível acadêmico. O estudo tem como objetivo analisar o papel das inteligências múltiplas dos alunos na aprendizagem de uma segunda língua. Para isso, 120 alunos de universidades russas participaram deste estudo. Sua seleção foi aleatória. A pesquisa é correlacional e descritiva, e estatística inferencial, teste t para amostras independentes e análise de variância (ANOVA) e software SPSS foram usados*

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*para analisar os dados. Os resultados mostraram uma relação positiva e significativa entre alguns componentes da inteligência e da aprendizagem de uma segunda língua.*

***PALAVRAS-CHAVE:*** *Inteligência múltipla. Aprendizagem de uma segunda língua. Alunos. Linguagem.*

***RESUMEN:*** *Una de las necesidades humanas esenciales que puede garantizar el éxito en diversas áreas de la vida es la inteligencia. Debido a la importancia de este tema, el investigador de la teoría de la inteligencia múltiple ha seleccionado a Howard Gardner como una de las principales teorías de la inteligencia como investigación y ha estudiado su papel en el éxito del aprendizaje de una segunda lengua y dos factores cruciales del lenguaje (gramática y redacción). ) a nivel académico. El estudio tiene como objetivo analizar el papel de las inteligencias múltiples de los alumnos en el aprendizaje de una segunda lengua. Para ello, participaron en este estudio 120 estudiantes de universidades rusas. Su selección fue aleatoria. La investigación es correlacional y descriptiva, y se utilizó estadística inferencial, prueba t de muestra independiente y análisis de varianza unidireccional (ANOVA) y el software SPSS para analizar los datos. Los resultados mostraron una relación positiva y significativa entre algunos componentes de la inteligencia y el aprendizaje de una segunda lengua.*

***PALABRAS CLAVE:*** *Inteligencia múltiple. Aprendizaje de una segunda lengua. Estudiantes. Lenguaje.*

## Introduction

The development of digital technologies and their application in various fields of activity contribute to the growth of scientific interest in general theoretical and practical research, including law. "Modern prospects for the development of civil law are largely associated with the use of digital technologies in property relations and are determined by the awareness of the effectiveness of the application of the model of civil law regulation of digital rights and opportunities for civil circulation of digital technologies" (Kartskhia, 2019).

Under the Decree of the President of the Russian Federation of 07.05.2018 No. 204 (The Decree of the President of the Russian Federation No. 204 of May 7, 2018 "On the Strategy for Economic Security of the Russian Federation until 2024"), one of the essential national development goals is to accelerate the technological development of the Russian Federation and ensure the rapid introduction of digital technologies in the country's economy and social sphere.

The banking sector holds a special place in the modern market economy, being an integral part of almost any financial relationship. A feature of banking is its commercial basis, despite many restrictions, prohibitions and conditions for the activities of credit institutions engaged in banking activities, determined and sanctioned by the state, including the Federal Law "On Banks and Banking Activities" (Federal Law No. 395-1 of 02.12.1990 "On Banks and Banking Activities").

The presence of electronic devices in banks does not cause surprise or difficulties in terms of their use. However, in banking, such devices are only a digitalized means for the implementation of banking operations and transactions. Today, the banking sector, like other spheres of society and the state, is undergoing significant changes due to the widespread introduction of digital technologies into the activities of organizations. Many large banks began to actively implement various innovative pilot projects, investing heavily in the development of digital technologies.

In 2013, Brett King (a recognized expert, strategic advisor in financial services and founder of the International Academy of Financial Management) published another book called Bank 3.0. Why today a bank is not where you go, but what you do" (King, 2013), which has become a table for the heads of large banks. Later, another book was published, "Bank 4.0: New Financial Reality" (King, 2018). In these works, the author analyzes in detail various trends affecting the overall financial sector and also proposes a model of a modern "digital" bank based on multiple digital technologies. B. King makes one think about what awaits Russian banks in a few years, and also suggests that the success of a particular credit institution largely depends on how well its services meet consumer expectations. Innovation is inevitable; banks will either have to radically change or give way to more flexible and advanced competitors.

In this regard, in a competitive environment, many credit institutions are actively going for the creation of perfect banking, introducing and developing Internet applications, developing software to speed up banking services, taking part in various discussions about artificial intelligence, etc. Today, we can speak of banks as high-tech companies, since most of the largest Russian banks have already begun implementing the achievements of the IT industry (for example, Sberbank, Tinkoff Bank, VTB, Alfa-Bank, AK BARS Bank, etc.).

## Materials and Methods

The main methods used to write this paper are the comparative legal method, complex analysis, interpretation, the legal and sociological method, system analysis, and intersectoral approach.

## Research Results

The main elements of modern financial infrastructure in the era of digitalization include a system of fast online payments; Unified identification and authentication system (UIAS) (including the use of biometrics - (UBS) Unified biometric system); various platforms based

on distributed ledger technology (blockchain) to speed up document flow between organizations; financial marketplace. Let's consider some issues of the implementation of digital mechanisms in the banking sector and their legal regulation.

One of the directions for the development of digitalization in the banking sector is the use of smart contract technology, the appearance of which is associated with the introduction and improvement of blockchain technologies. It should be noted that since October 1, 2019, the legislator, in the norms of the Civil Code of the Russian Federation (Art. 309), has provided for the possibility of concluding such "self-executing" transactions, while the doctrine only discusses the legal nature of smart contracts. But at the same time, with a certain degree of confidence, it can be argued that the use of smart contracts is one of the promising areas for the development of the digital economy.

Smart contracts, in particular, can be used in standard bank transactions, including loan agreements, pledge agreements, loan, deposit, etc., which will automate the relationship between the bank and the client and accelerate the response to the client's failure to comply with the terms of the transaction with automatic charges, fines, penalties and other sanctions provided by the contract. At first glance, the use of smart contracts can significantly reduce the bank's costs for labor and material resources. However, one should not forget about the possible legal and financial risks.

Firstly, a smart contract is not a contract in its usual sense, but a kind of computed program code, which cannot document all the necessary legal subtleties of the transaction.

The issues of complying with the rights of clients to choose the form of the transaction remain unclear. Bearing in mind that agreements concluded with credit institutions, by their legal nature, have the force of a public accession agreement, the client accepts by default the terms of the agreement dictated by the banking form of the deal. Due to the specifics and complexity of a "self-executing" smart contract, given the hard program code without the possibility of alternative changes to certain conditions in the event of various subjective and objective circumstances, the client is deprived of the right to apply changes to specific conditions of the contract provided for by law during the term of the contract. Consequently, there is a violation of the principles of civil law and the applicability of smart contracts in banking transactions either in general or in cases where the alternative provisions of the contract are of significant importance (for example, the possibility of changing the terms of payment and amounts under a mortgage agreement with an individual client in case of unplanned financial difficulties, including downsizing at work and finding a new vacancy in the short term).

The contract is a relatively holistic legal regulator. Therefore it a priori contains all the elements of the mechanism of legal regulation of social relations. At the same time, one should understand that "contracts defined as smart contracts refer to the law of obligations, the "density" of provisions in which is very high" (Shpagonov et al., 2019). In general, one should question the effectiveness of the organization's activities based on robotic contractual work without the participation of professional lawyers (Khabibullina et al., 2019).

The regulatory consolidation of the provisions on smart contracts undoubtedly requires the development of a theoretical basis (concept) reflecting the mechanism for the implementation of such cooperation technologies and the possible risks of their use.

The introduction of artificial intelligence is no less effective in banking. So far, artificial intelligence itself has not been created, but its prototypes (for example, expert systems) are widely used. They are computer programs that operate formal logic to access big data of specialized information. Also, on the basis of expert systems, one can predict the prices of stocks, bonds and other financial instruments (Sadyrzhanov, 2018).

One of the areas of application of the expert system can be the activity of credit committees to analyze the possibility of providing a loan to a client. The system will carry out a forecast of probable risks and analysis of the reliability and solvency of the client, which will significantly increase the speed of consideration of the application during the formal analysis of the bank's regular customers and allow to ease the burden on the bank's staff. At the same time, the transaction itself, as mentioned earlier, can be concluded using the form of a smart contract.

Big Data is another complex element of the digital economy. Data collected from all corners of the world is brought together and used for a variety of purposes that could not have been predicted by the data providers. Subjects with access to big data are in a position of "invisible" power compared to those who do not (Zeynep Tufekci.2014).

Modern banking is based on the fundamental KYC (Know Your Client) principle, the value of which is in the bank's identification of customers and beneficiaries of banking operations (Kamalian, 2019). If we talk about the introduction of blockchain technology, then it is based on the complete anonymity of the parties to the transactions, we only know what they transfer to each other. This technology has a wide scope for illegal operations and transactions, including those aimed at money laundering and terrorist financing. Considering the above, the question arises about the advisability of introducing and using blockchain in the activities of credit institutions so as not to violate the legislation on combating money laundering and terrorism financing.

In the banking sector, banks can share big data containing information about clients to analyze their solvency and credit history. This interaction is consistent with the purposes of processing the data provided by customers, and in general, their turnover within the banking sector does not contradict the current legislation. However, given the storage of this data in digital form, namely in a computer program, and the transfer of information to banks in cyberspace using the Internet, there is a risk of unauthorized data hacking. Thus, the bank, as a party responsible for the protection and protection of information that has become known to it in connection with the implementation of its main activities, is obliged to take comprehensive measures to determine the mechanism for protecting information, including big data, methods of their transmission, methods, the possibility of identifying customers when using any technologies.

Going back to one of the foundations of banking - its security, bearing in mind the state of protection of the interests of all subjects of a commercial bank, including owners, personnel, customers, and objects, including material values and information resources, there is an urgent need for its modernization to modern conditions.

Information with limited access and other confidential information, regardless of its form, as well as the form and type of its provision, must correspond to safe conditions. In the context of digitalization of the banking sector, the security of not only the information itself, but also the reliability of the persons who provide it, the legality and reliability of the information received, the legitimacy of the interests of the person who provides it, the legality of representing the interests of the original holder of information by a third party becomes one of the priority tasks of the bank when using new digital and other types of technologies (Eriashvili, 2017). Indeed, if in relation to material values, even in the case of individual changes in connection with digitalization, the existing norms of civil legislation, complicated by the presence of a digital element, will still apply, then the security of possession and use of information resources is currently under threat and at the same time is becoming one of the risks of the new type of a bank when processing information received from outside and from within the banking system in the digital space - the so-called cyber risk.

As S.Iu. Pertseva notes, "digital transformation provides for not only potential opportunities and benefits, but also significant risks and threats. To eliminate them, we should harmonize the regulatory framework in financial technology regulation, especially in terms of cybersecurity and data security. It is important to emphasize that the sustainable development of the Russian financial sector requires innovative drivers of economic growth as a whole"

(Pertseva, 2018). Thus, the lack of effective legal tools can lead to risks, for example, related to identification, cyber threats, etc.

We should say that the complexity of ensuring security and reducing the level of cyber risk lies in the fact that the digitalization of any element of banking activity occurs in a complex manner, forming a new digital infrastructure of the business process or the activities of the organization as a whole. As Benedict Kingsbury rightly points out, internationally, organizations are gradually moving towards advanced digital infrastructure - leveraging sources such as IoT devices, sensors, biometric scanners, satellite imagery, bank and remittance technologies, social media links and content analysis. telecommunications metadata, and often the use of contracts with private companies and their processing by machine/artificial intelligence systems. It is not surprising that at present the international legal framework for many of these issues is meager, lamentably lagging behind and in dire need of construction (Benedict Kingsbury,2019).

Sharing the view of B. Kingsbury, we should admit that the digital infrastructure is not known to the required extent either by international law or Russian legislation. This significantly affects the need for a comprehensive rethinking of existing norms, their change and the creation of new, additional regulators. In this regard, the Russian Federation adopted the state program "digital economy of the Russian Federation" (Passport of the national project "The "Digital Economy of the Russian Federation" National Program"), which contains a plan to modernize legislation that has already begun to be implemented to include digital relations in the legal framework.

At the same time, the absence or insufficiency of the norms established by the legislation regulating the use of digital technologies in business and the limits of their application, entails the need for credit institutions to independently use new digital mechanisms. However, such self-regulation of digitalization in the banking sector is insufficient since the private management of cyberspace is currently devoid of true legitimacy and accountability in the legal space (Helmut Aust, 2017). The lack of a proper regulatory framework in the field of digitalization has a negative impact on the mechanism for ensuring the protection and security of data, and also significantly reduces the level of confidence of consumers of financial services.

Any transaction with the participation of the bank is essentially preceded by a number of actions, both by the credit institution itself and by the person who applied to it, the procedure and mechanism for the commission of which are regulated by the local regulations of the organization, considering the current legislation. In this regard, we can talk about the relative independence of the bank in determining the forms, methods, mechanisms, technologies, tools

for the implementation of banking activities. Indeed, the absence of full government intervention in the economy predetermines the independence of credit institutions in planning and organizing their activities. And in this case, the use of newly emerging digitalization mechanisms by banks in its activities is currently a burden for the bank in terms of organizing their use, ensuring security when working with closed data and the responsibility of the bank and its employees.

**Summary**

With a certain degree of regret, we have to state that the legal, legislative consolidation of the foundations of digitalization in the financial sector does lags behind technological progress, with innovations, which in turn slows down the pace of changes in the banking sector.

Considering that banking operations permeate all spheres of society and the state, the variety of customers and the riskiness of banks' activities, it is necessary to modernize the legal mechanisms to support the security of such activities, especially those related to the circulation of closed-access information in the context of the digitalization of the economy. Today, there is a need for rational management of big data, effective protection of resources and solving other common problems associated with the use of such data. All of the above allows us to conclude that the complex and uncertain nature of the problems generated by new digital technologies necessitates a multidimensional approach both at the global and national levels, as well as expanding cooperation between public/private actors and epistemological communities.

**Conclusion**

The discussed problems of digitalization in the banking sector are extremely relevant and debatable. The most popular digital transformation technologies in the Russian banking sector include Big Data analysis, Internet platforms, applications, smart contracts, robotization, chat bots, optical recognition systems, artificial intelligence, Internet of things, and blockchain. Digital technologies are penetrating all sectors of the economy. However, Russian legislation does not yet fully meet the challenges of effectively using the capabilities of digital technologies.

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