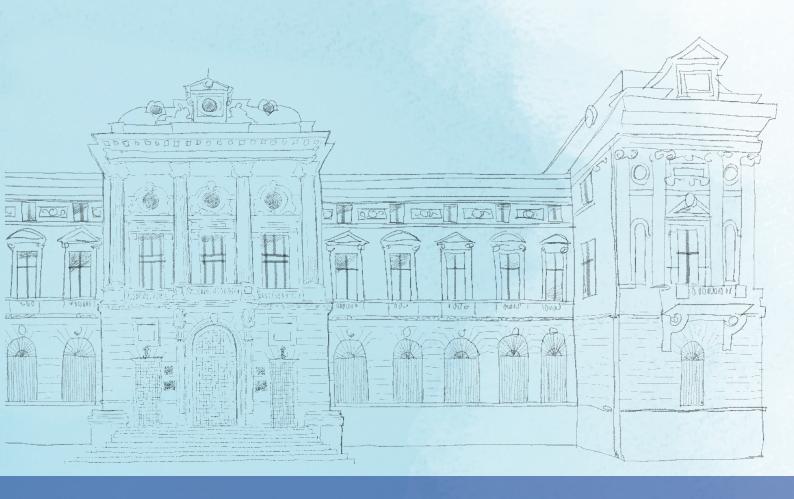


# Newsletter on Financial Education



## Contents

Financial education and digitalizationby Eugen Nicoläescu, Deputy Governor of the National Bank of Romania	3
Educational policies and digitalizationby Sorin Ion, Secretary of State, Ministry of Education	4
Shopping 'til it hurts	5
Public trust in Artificial Intelligence  Tudor Turcu, The Authority for the Digitalization of Romania	6
Financial education, games and digital culture	7
Mastercard initiatives to increase financial education in Romania	8



### Financial education and digitalization

Eugen Nicolăescu, Deputy Governor of the National Bank of Romania

The continuous technology, diversity and high degree of complexity of most financial products and services have led to the emergence of new requirements in the field of education, namely, financial education through digitalization.

Twenty-five years ago, the Internet was at the beginning and cell phones were a luxury. Social media came later, with internet access via very slow 3G technology. RTGS, SWIFT category systems are already 25 years old and represent money transfer systems between banks around the world. These technological areas are always trying to reinvent themselves through digitalization.

Financial education through digitalization, according to the 2020 OECD recommendation, refers to a combination of financial awareness, knowledge, skills, attitudes and behaviors needed to make sound financial decisions and ultimately achieve individual financial well-being. However, the level of financial education among individuals remains low, making it a priority for EU policymakers. This is all the more important given the increasing

digitalization of the entire financial ecosystem.

Financial education and digitalization are in a special dynamic. In these times, a global economic and financial market has more and more participants and a diversity of influencing factors.

The governments' strategies have the role of putting this type of education in the field of national interest, because by practicing in the online environment some skills in the financial field will lead to a considerable improvement in the attitudes of the young generations to manage money in real life.

EU Member States, public authorities, consumer associations, the private sector, academic environment, as well as other actors in this field can play key roles in addressing and reducing people's lack of knowledge about financial products and services offered by the market.

In the study of topics related to financial education, digitalization should occupy an important place in order to maximize the impact of these initiatives.

### Educational policies and digitalization

by Sorin Ion, Secretary of State, Ministry of Education

The pandemic context has accentuated, more than in other times, the discussions in the public space, going beyond the borders of the pedagogical environment, about the need to adapt educational systems to the demands of society, to correlate with current and, especially, future realities. That in the perspective in which students entering the education cycle will be graduates and adult citizens after 2035.

The preparation of students for life requires a resizing of the school curricula and of the framework plans, so that the so-called new educations get in the right context of implementation. In the Romanian educational system, the education for life module, which will be applied throughout the entire pre-university education cycle, is intended to prepare future adult citizens for life through content structures, which can be designed as a study module or school subject, especially in an interdisciplinary and transdisciplinary plan. Such a structure aims at

financial education, which, already integrated in the school curriculum, acquires new connotations in relation to the digitization and evolution of the financial-banking system.

As money is a reality in human existence since childhood, it is necessary to educate people for the proper management of money, for adopting financial decisions, planning and organizing expenses, purchasing goods and services, relating to a budget. Thus, there are prerequisites to reach the harmonious development of the human individual in society, in accordance with the specifics of the contemporary world. It would be a sign of contemporary civilization.

A value itself, education promotes various values within school subjects. The financial value, as a reality of human society, reflected in literature over time especially through negative connotations, deserves an adapted perspective in relation to the profile of the successful man of the future.

### Shopping 'til it hurts

Carolina Oancea, Senior expert, National Bank of Romania

Cards are like fuel for shopping. Unfortunately, the easier to shop, the more likely to do it in excess. As credit cards have become a popular method of payment, researchers have noticed an interesting trend. People tend to spend more when using credit cards than cash. They are more willing to buy things at a higher price or more likely to give in to the urge to make an impulsive purchase. For example, McDonald's once reported that its average ticket was \$7 when people used credit cards versus \$4.5 for cash.

Thus, an important question has risen: Why do people spend more when using credit cards? There is neither a simple nor a unique answer to that. First, this happens because cards are easier to use than cash. Second, with a card, you can shop online 24/7. But besides the practical aspects, there are also subtler psychological reasons. Finally, it is easier to fool yourself that you are not spending "real" money when you pay by credit card. Cash is real. It is a tangible thing, a piece of paper/plastic with a value printed on it. When you spend cash, you can see that you have less of it in your wallet. In contrast, when paying with a card there is no such immediate visualization of your shrinking account balance. According to a scientific experiment,

credit cards "effectively anesthetize the pain of paying. You swipe the card and it doesn't feel like you're giving anything up to make the purchase, unlike paying cash where you have to hand over bills." In this experiment, 26 adults were each given \$20 to spend on a series of products. If they made no purchase, they would be able to keep the money. The participants viewed the products while lying in a functional magnetic resonance imaging scanner that allowed researchers to identify which regions of the brain activated during the decision-making process. The results indicated that areas of the brain associated with pain activated when subjects saw prices that were too high.

Although credit cards effectively anesthetize the pain of paying, truth be told, impulsive shopping will cause pain...eventually.



### Public trust in Artificial Intelligence

Tudor Turcu, The Authority for the Digitalization of Romania

According to the most popular definition, artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. AI has a great potential to improve our lives in countless ways, from simplifying our shopping to enhancing our healthcare experiences. Its contribution to business is undeniable. According to McKinsey Global Institute, by 2030 AI could deliver additional global economic output of \$13 trillion per year.



But, with great power comes great responsibility.

The risks and challenges that AI entails for society are also significant. As potential of

using AI in the public sector has become more obvious, setting the general principles for its responsible application as well as the training of the civil servants to work with AI are becoming important issues. Public trust in AI depends not only on ensuring data quality and integrity, but also on implementing models that are ethical and generate responsible

decisions. If AI systems do not prove to be worthy of trust, their widespread acceptance will be hindered.

Even if we are not aware of it, AI has a wide range of application in our daily lives from news recommendations and commercial ads to medical examination or selfdriving cars. No doubt, artificial intelligence has a significant role in education, too. As digitalization has been one of the main drivers of innovation in education practices in the classroom in the past decade, AI will probably redesign the learning process by providing personalized tutoring. "In the field of education, AI is expected to have a significant impact, transforming the way teachers work by offering new teaching aids." (UNESCO, 2020)

In Romania, the institution in charge with coordinating and supporting the digital transformation of the economy is the Authority for the Digitalization of Romania, established in February 2020. To accomplish this goal, ADR works together with the private sector, civil society, universities and other public institutions in developing solutions for making AI more accessible and more trustworthy.

### Financial education, games and digital culture

Ciprian Bradu, Economist, National Bank of Romania

Probably you have heard at least once the saying: "Life is a game. Play it!" Starting with millennials, it had become more applied in the context of the digital world, with its intrinsic ludic experiences. As such, teachers need to learn how to play in this new world and deliver knowledge to students through new methods.

One topic which can inspire teaching through play in this new culture of digitalization is the "enculturation". This is a sociological concept, which refers to the cultural learning process of the individual. It was adapted from Church practices, which used cultural methods through centuries to teach its theology to many different nations, generations and cultures (A. Shorter, 1999). Mutatis mutandis, educators can get inspiration for teaching children who live in our world, but are culturally very different from us, sometimes living in another universe, not only metaphorically. During the pandemic period, many of them literally attempted to become part of another world, the "metaverse".

On one hand, building bridges across cultures requires time. Time to observe, time to play, time to understand the "otherness" of

different worlds. Using this new approach also requires time to learn youngsters' new language - emojis, digital slang, abbreviations, words with a new meaning etc. This time spent by teachers to better understand is precious both for them and for the children who appreciate the effort to be understood by an educational system which is typically used to show its unfortunate rigidity and conservatism.

On the other hand, teachers need to employ digital tools in order to appropriate the digital culture. Such an example is the Kahoot platform which has been increasingly used by Romanian teachers in these last years. This implies an extra effort, as well as facing the challenges of technological advancements. However, this effort is rewarded, as students will also appreciate teachers who use digital tools correlated with learning objectives. Therefore, they will pay more attention and will develop and use critical judgement.



# Mastercard initiatives to increase financial education in Romania

Cosmin Vladimirescu, Country Manager, Mastercard Romania

Financial education allows us to make informed decisions, which ultimately contributes to our personal well-being. Fostering prosperity around the world is one of Mastercard's sustainability pillars and includes initiatives to support financial inclusion. In this regard, one direction of action is championing financial education among all age groups, across the country.



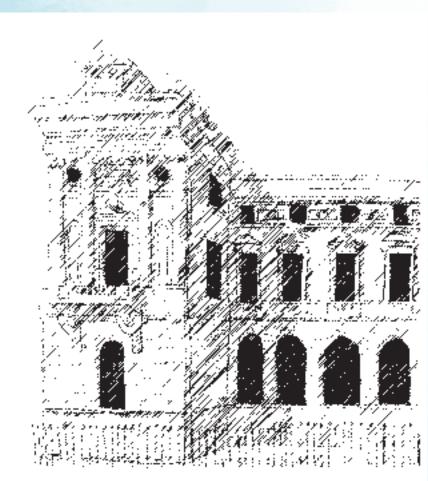
Since 2015, Mastercard has been partnering with the Association for the Promotion of Performance in Education, an organisation that helped promote financial education as an optional course in schools, with funding, know-how and support for the printing and free distribution of financial education manuals in schools and the organization of the annual competition Little Bankers' Olympics.

We wanted to do more than keeping the financial education as an optional in schools curriculum, so we came with the initiative to introduce financial education notions in the compulsory topics. In October 2022, together with Junior Achievement Romania, we launched "The Finance Lesson", a national teaching program supervised by the Ministry of Education, addressed to secondary school teachers for the development of skills needed to integrate and teach, in an interdisciplinary and hybrid learning approach, elements of financial education adapted to the 11-15 age group.

To reach a mature and more broader audience, Mastercard partnered with Radio Romania Actualități, the radio station with the largest national coverage. Starting this September, for three months, Radio Romania Actualități began producing two-minute financial education pills, broadcasted every Tuesday and Thursday, twice a day. The addressed topics are related to managing finances, digital payments, understanding and accessing banking products and tools.

Through financial education,
Mastercard aims to empower people
everywhere to reach their full
potential in the digital economy.

This newsletter is a regional project for central banks with an interest in financial education.



### **Contact:**

25 Lipscani Street Bucharest, Romania

Phone: +40 311323801

Email: educatie.financiara@bnro.ro

