CURRENT CHALLENGES OF OUR SOCIETY

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Abstract: *Human society is now directly linked to digitized technologies, creating a "robotic effect" for the future of society. People and technology are connected directly and permanently. Scientific discoveries have influenced society and progress over the years, and examples include the discovery of fire, the invention and development of vaccines and antibiotics that have allowed people to reduce their mortality rates significantly in the eighteenth century. Another example of scientific progress is the use of fossil fuels, electricity, fertilizers, etc. These discoveries / researches / inventions have changed the way people live. More at this moment, we are witnessing technological breakthroughs (blockchain technology) in the virtual space with implications for everything that exists, from education, industry, services, finance, research and continuing at the societal level.*

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JEL Classification: F15, F41, F62

Romania through its integration into the European Union has had and hopes for progress and prosperity. As in every state, our country also reflected the European path of Romania „in GDP growth per capita compared to the European Union average from 39.3% in 2006 to 58.2% in 2016, which justifies us considering that the process the real convergence of the Romanian economy within the Union has been and still is a success story." (BNR, 2018)

It is a fact that today we are confronted with the extraordinary impact that digitization plays in global economic development. We have to point out that social inclusion and technological - financial progress are the results of the digitization trend of the economy with a major impact on the activity of financial institutions. The creation of new business models, the emergence of new opportunities for customer access and the management of cloud-based projects and documents are just a few of the challenges that the current economy has undergone through a continuous process of innovation and adaptation. The phenomenon of „digitization" has created new opportunities for customers: easy management of business activities at company level, revenue collection, payment of bills and fees, etc.

The use of this tool should become more concrete and consistent in Romania, and customers should be educated to master new digital tools. There is no doubt that there is a revolution! In the context of the financial crisis, the digitization of the economic sector continues to grow, providing new digital opportunities for new generation customers.

We must take advantage of rapid technological change to make the world more prosperous and inclusive and to support social inclusion through innovative solutions. Blockchain technology is thus a tool adapted to the current digital revolution. For many of us, the current increase in access to digital technologies brings more choices and convenience. Through the process of social, economic and financial inclusion, the blockchain is a real mechanism of today's digital technology to reach economic, financial services for the poor and disadvantaged. New mobile technologies allow vulnerable groups (women, people with disabilities, etc.) to participate more easily in the labor market as entrepreneurs in on-line or outsourcing (Manta O, 2017).

In a world that changes almost overnight powered by the latest communication technologies, the financial sector has no chances to avoid this true digital tsunami. A very interesting report in 2014 says that "in many emerging markets, most people live outside urban centers without easy access to infrastructure such as banking, transport, electricity and roads. This is a base of potential customers in communities where mobile money are the only real cash competitor. "Large-scale market research in other industries suggests that rural customers tend to have stronger loyalty to their big brands, making them a valuable market segment. and the loyalty of the rural market, the evidence suggests that most mobile mobile service providers have not yet expanded their services beyond urban centers. The provision of sustainable business services in rural areas presents more or more challenges, less acute in different markets: more dispersed populations, low levels of literacy, lower access to basic infrastructure, and lower and often sporadic incomes of households (Manta, O. 2017).

Understanding the scope and breadth of challenges will help suppliers be more strategic in expanding the scope of mobile telephony services and adapting their approach to the specific market context. The expansion of mobile / mobile money / non-urban money has so far tended to be a gradual delivery of services beyond urban centers rather than strategic suppliers' efforts to adapt services to meet the needs of rural customers. A more strategic approach could help providers expand both on advanced mobile money markets, where stagnation in saturated urban areas and in markets with limited urban market potential, where commercial success depends on expansion in rural areas. (Jennifer Frydrych and Hege Aschim, October 2014).

Here is another concept that we are confronted with in the new digital world: "Big Data, Small Credit"! The Digital Revolution Report and its impact on emerging market consumers! stresses that "technological advancements in credit assessment are about to produce a huge impact by bringing an official, accessible and affordable credit to hundreds of millions of middle-class consumers aspiring to emerging markets." A foreground of this change is a field new growth, which we call generic "Big Data, Small Loans" (BDSC). Throughout the world, many consumers in emerging markets remain extremely limited in access to formal financial services, especially unsecured loans. In India, more than 400 million people borrowed money in 2014 - but less than one in seven were approved for an official loan. Indeed, this experience of being "invisible" to formal lenders is widespread among billions of "no-file" consumers living in almost all emerging markets today. But these consumers cannot remain "invisible" to formal creditors for a long time, partly because of the use of rising new technology "(Arjuna Costa, Anamitra Deb and Michael Kubzansky, 2014.) Each time these individuals make a phone call, they send text, browse the Internet, hire social media networks, or fill in pre-paid cards, deepen the fingerprints that they leave behind. fast and innovative developers began using highly predictive technologies and algorithms to query and generate perspectives from these prints (Manta O, 2017).

These BDSC companies use varied forms of non-traditional data - from mobile call records and billing payments to Internet browsing and social media behaviors - to create a new way to assess consumer risk, determine consumer credit ratings "invisible", then offers convenient, faster, and often cheaper loans to the previously disadvantaged. Their main offer: unsecured consumer credit, in the short run, the small ticket served at a dramatically lower cost than traditional loans. The social impact also promises to be profound. BDSC offers can boost the entry of millions of middle class consumers into the official credit system. Transforming an "invisible" former consumer into a "visible" and formal consumer not only gives dignity and respect but also opens the door to formal savings and insurance services as well as financial management tools. It also allows small and medium-sized households to better capture opportunities and manage economic shocks. Indeed, the emergence and growth of BDSC services leads to the consolidation of the story of the continuous growth of emerging markets in the world - a great economic trend in the 21st century. To comply with BDSC's promise, financial service providers, data collectors, innovative entrepreneurs and regulators will have to work together. And BDSC firms must continue to create attractive offers to consumers, both in terms of their financial attributes and their trust and transparency. Both the lender and the consumer must have benefits. Waiting is great, the economy makes sense, and the potential gain in empowering consumers to improve their lives is significant."

GAFA is an acronym for Google, Apple, Facebook and Amazon - the strongest 4 US technology companies. The use of the term "GAFA" is becoming more and more common in Europe. The acronym, originally launched in France, is used to identify the four companies as a group. We are already talking about the GAFA generation as being composed of those who use almost exclusively the services of the four companies mentioned. The truth is that we are witnessing a change in how consumers see financial services, customer service and shopping. With almost nothing to do with the banking industry (as an object of activity), these giants of technology are now directing the pace of innovation across the industry and redefining expectations, putting banking institutions in battle with the rapid pace of their transformation. While a regular consumer does not really notice the transition, professionals have to face the reality and take the challenge that these followers of tech news have suddenly imposed on financial professionals. In this situation, it was natural for financial institutions to find out how this new environment - and its successors - is acting in the opposite direction to the services it offers. Just because changing consumer trends creates new opportunities for financial providers. Consumers' behaviors and expectations change in ways that will challenge financial service providers to rethink their customer service - and even turn their distribution patterns (Manta O, 2017).

Accenture Financial Services Global Distribution & Marketing Consumer has conducted a study that has gathered the views of nearly 33,000 financial services consumers - including bank, insurance, and investment advice clients - from 18 markets. The research has identified valuable information about how customers want to interact with financial providers in the future and where digital innovation should play a role. But it also suggests that providers who can offer both a new, compelling digital services model and maintain traditional values of trust and service will be best placed for the competitive battlefield. (Accenture, 2017). Many consumers, collectively called GAFA, are attractive alternatives for traditional financial providers. This is even greater in markets like the United States, where 50% would like to make this exchange. 36% of respondents would consider acquiring insurance from an online service provider such as Google or Amazon. 46% of respondents would consider buying investment advisory services from an online service provider. Also, three types of distinct personalities of consumers have emerged in the research findings, each having specific characteristics of what they value most from their financial providers, which determines their loyalty and how they would like suppliers to accept innovation digital. The main loyalty factors are costs; customer service (defined by high quality and reaction); trust (especially in

customer interest and data protection) and appetite or willingness to consider new digital models. The different needs and priorities of these groups provide insight into how financial providers may need to reconsider their proposal both to ensure loyalty to existing customers and to reach new consumers.

So they are nomads - a highly active digital group ready for a new delivery model; hunters - those who are looking for the best price offer and quality seekers - looking for high quality, responsive and data protection services. Certainly, it is also good to know the sector's response to these market trends.

Changes in consumer behavior that the study identifies send messages to the financial services sector:

1. Clients have control - financial providers were accustomed to controlling the relationship with customers, but now consumers have this control.
2. Retail financial services are no longer "business-to-consumer" (B2C) - the relationship has now become "consumer-to-business" (C2B). In a world where the customer is in control, suppliers must show every day that they are dedicated to customers and are mindful of providing excellent quality services. However, they need to do so effectively, given the margin pressures and the desire of shareholders to achieve optimal returns.
3. Look for new opportunities from a data point of view - Financial providers need to tap the trend of consumers who want to share more personal data, for example by capturing new money generation opportunities.
4. Consider your platform approach - Customers spend more and more time on digital platforms such as those offered by GAFA (Google, Amazon, Facebook, Apple). To remain relevant to customers, financial service providers need to reach customers on these platforms with personalized products at the right time. This is especially true for Nomads customers who are the most open to digital innovation.
5. Simplify customer navigation through channels - Providing trouble-free navigation has become vital to attract potential customers and prevent existing customers from switching suppliers. Processes that previously required physical interaction will have to be resumed with their transition to online, while providers will need the ability to collect and share real-time data on customer interactions to allow for perfect transfer between channels (Manta O, 2017).

GAFA's banking approach is "to remain the center of attention in the lives of consumers, developing new revenue streams, banks need to develop their business models by focusing on their own business portfolio as well as on future business opportunities. is to rapidly develop a viable response to emerging digital disruptors, while managing strategic risk to avoid losing

revenue for those disruptors. The key here is the interaction between the "GO Digital" and "BE Digital" agendas, where the first refers to the focus business, and the second relates to activation "(Accenture, 2016).

The realities of the rural areas facing small farmers, including the low level of education (according to the statistics provided by the National Institute of Statistics) and the lack of access to modern financial instruments according to size and their requirements are very important. These conditions mean that people involved in developing models for microfinance institutions need to create new and innovative solutions to finance farmers' needs. Existing communication technologies give us new opportunities for rural microfinance by reducing business costs. New microfinance facilities have great potential for addressing the risks faced by small farmers. In addition, combining financial services with non-financial services, such as technical support, marketing, and financial consulting offer new opportunities for small farmers to increase productivity and revenue and integrate their production into full value chains.

Finally, from micro level to macro level, it is necessary to create a favorable environment for policy making and a legal framework for the implementation of rules and regulations. The progress of financial inclusion is the result of the digitalisation trend of the financial sector with a major impact on financial institutions. Creating new distribution models (external agent networks, banks without a branch network, etc.), new customer access opportunities and back office management are just some of the challenges the microfinance sector can only pass through -It continues innovation and adaptation. The "microfinance" phenomenon has created new customer opportunities: easy management of household savings, revenue collection, payment of bills and taxes. Its use must become more concrete and consistent in Romania. Customers should be educated to master these new digitized tools. There is no doubt that a revolution takes place! Rural areas, as shown by the Rural EU Review report, are estimated to generate 48% of the gross EU economy and 56% of total employment.

A typical feature of the rural economy is the presence of small and medium-sized enterprises (SMEs), many of which are micro-enterprises with a high percentage of independent jobs. Innovations in rural and agricultural microfinance have a significant potential to improve the subsistence and food security of the poor. Although microfinance has been widely studied, there is a large gap in knowledge, especially as regards the possibility of widening access to rural and agricultural microfinance. To get a complete picture of how microfinance works in rural Romania, we need to find some information about the technical infrastructure of data communications. Three out of four

Romanian households have access to the Internet after a 30% increase over the last six years, according to a Eurostat study, given that in 2016 the European average was 85% of households with Internet access. "Between 2010 and 2016, Romania and Bulgaria recorded the largest increases in the number of households with Internet access, but they are still among the countries with the smallest share in Europe," says the Eurostat study. A comparable level of Internet access in Romania is recorded in Bulgaria, Greece and Lithuania, all of which are below 75%. The opposite is Luxembourg, the Netherlands and Denmark, where nine out of ten households have access to the internet and where growth rates vary between 6% and 7% in 2010-2016. The rate of those who have never used the Internet has fallen by about 20% between 2010 and 2016, shows the results for Europe. However, in Romania and Bulgaria, a quarter of the population does not use the Internet. In Europe, more than a quarter of users use the Internet daily, and many users belong to the category of people with medium or higher education aged 16-54. The Internet is most often used to send emails, search for information, or read various publications.

According to a report by the European Commission, Romanians used the Internet for banking services less in 2016 compared to 2015, and online companies sold a little less. The figures are at least surprising given that banks have reported an increase in distance trading and e-commerce subscribers in 2016 by half a billion dollars (without taking account of bills and insurance).

The European Commission publishes an annual report on Member States' progress in digital integration. The report is based on an index called DESI (Index of Digital Economy and Society), a composite index that measures digital progress by five elements:

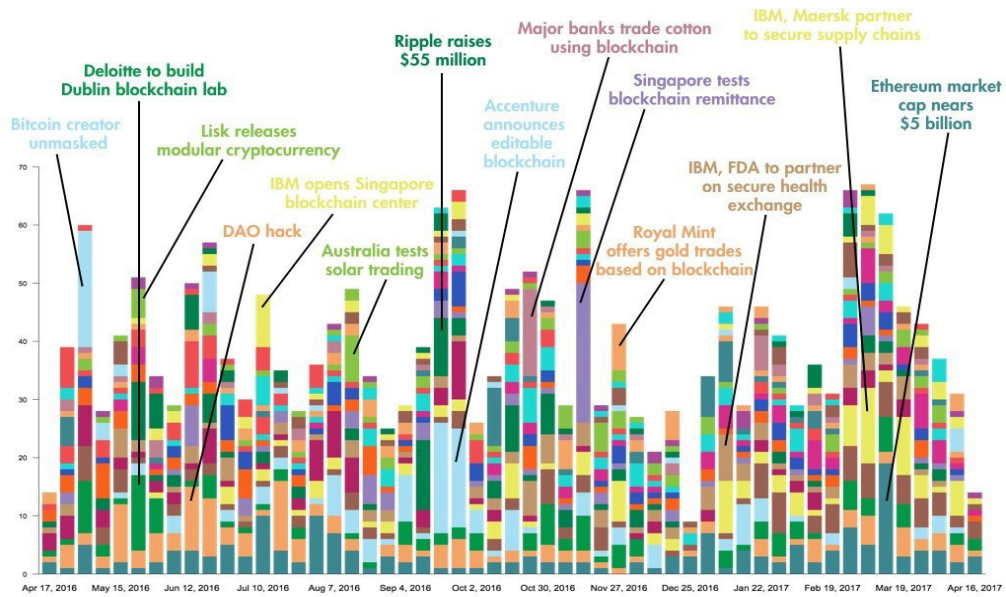
1. Connectivity - fixed band, mobile broadband, speed and price;
2. Human capital - Internet use, basic and advanced computer skills;
3. Internet usage - use of content by citizens, communication and online transactions;
4. Integration of digital technology - business and trade digitization;
5. Digital public services - e-government.

Romania currently has one of the highest proportions of high-speed broadband subscriptions in the EU, and more and more users are using broadband mobile services. Although the available spectrum is growing, covering fixed and mobile networks (4G), broadband remains one of the lowest in the EU. Internet users in Romania have done much less online than the EU average, especially for e-commerce and e-banking. Social networks and online video calls are, however, widely used. Romania is the largest country in Southeastern Europe with regard to the online audience, the number of Internet users is

8.8 million in December 2013, according to Gemius's "Online Lanscape in Southeast Europe" report. Traffic from mobile devices is growing rapidly on the Romanian market. Thus, if in January 2013 only 3% of Internet traffic is achieved through mobile phones and tablets, in March 2014 this percentage increased to 7%. Very interesting is that, while the rural population is almost non-banking, the only institution that offers financial and banking services in the Romanian villages is CEC Bank and Romanian Post, while 33% of people living in rural areas access the Internet. In other words, there is great service potential in the "remote banking" regime. The question is - will microfinance institutions know how to exploit this potential? (Natalia Plominska, Patrick Waledziack, 2013)

Another digital finance technology in the field of finance is blockchain technology. This technology based on news and information goes beyond the financial field in 2017, this large amount of data will have an impact on industries in all areas. The year 2016 was the year when Craig Wright launched the cripto currency bitcoin, although in the financial world skepticism largely involved, the volume of news and information in the public virtual space was all year round, which generated the desire of some to block this media fact.

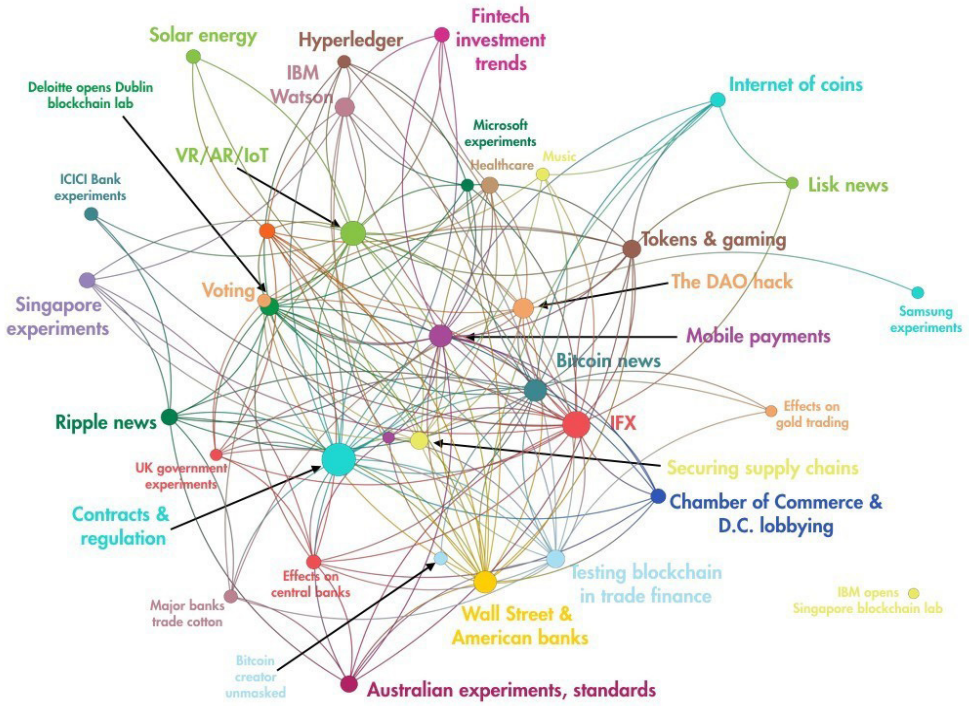
Chart no.1. Blockchain technology in the financial space between 2016 and 2017



Source : https://www.weforum.org/agenda/2017/04/5-infographics-that-explain-one-year-of-blockchain-news/ (date of access 28/04/2017)

According to the above chart, between 20 April 2016-20 April 2017, there were over 3,409 articles of cluster-colored blockchain technology news. This technology, based on structured "block-type" information in the network, which stimulates confidence in new concepts and financial products, implicitly microfinance models, creates opinion streams and guides regulatory bodies to prevent money laundering and prevent terrorist financing. In addition to the financial world, blockchain technology expands at extraordinary speed in all areas, including politics, and it is justified to prevent electoral fraud (such as Australia).

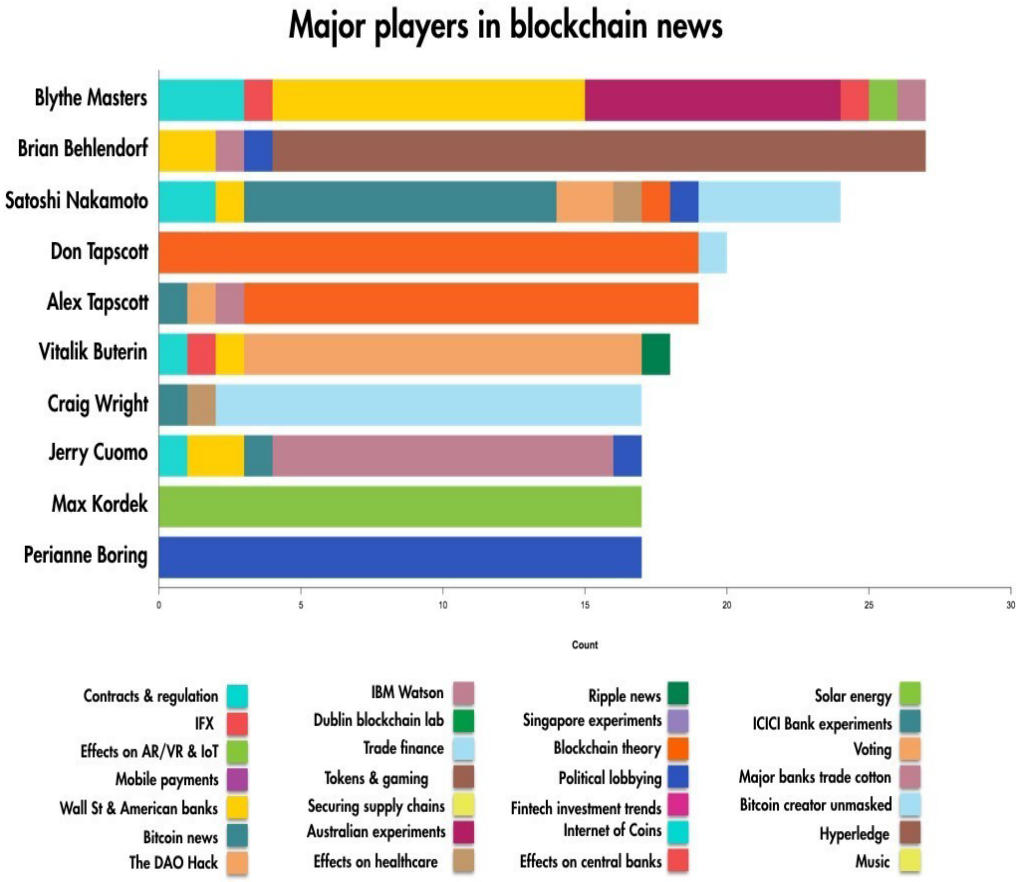
Chart no.2. The impact of the blockchain network in the financial field



Source : https://www.weforum.org/agenda/2017/04/5-infographics-that-explain-one-year-of-blockchain-news/ (date of access 28/04/2017)

In the digitized world in which we live, the emergence of new microfinance technologies in virtual space, we can say that their predictability is directly influenced by the big players' implication in blockchain technology. Currently, the biggest players of the moment in generating blockchain news are: Blythe Masters (Digital Asset Holdings), Bryan Behlendorf (open-source Hyperledger), Satoshi Nakamoto, Craig Wright and others mentioned in the chart below:

Chart no.3. Big blockchain news players in the world in 2017



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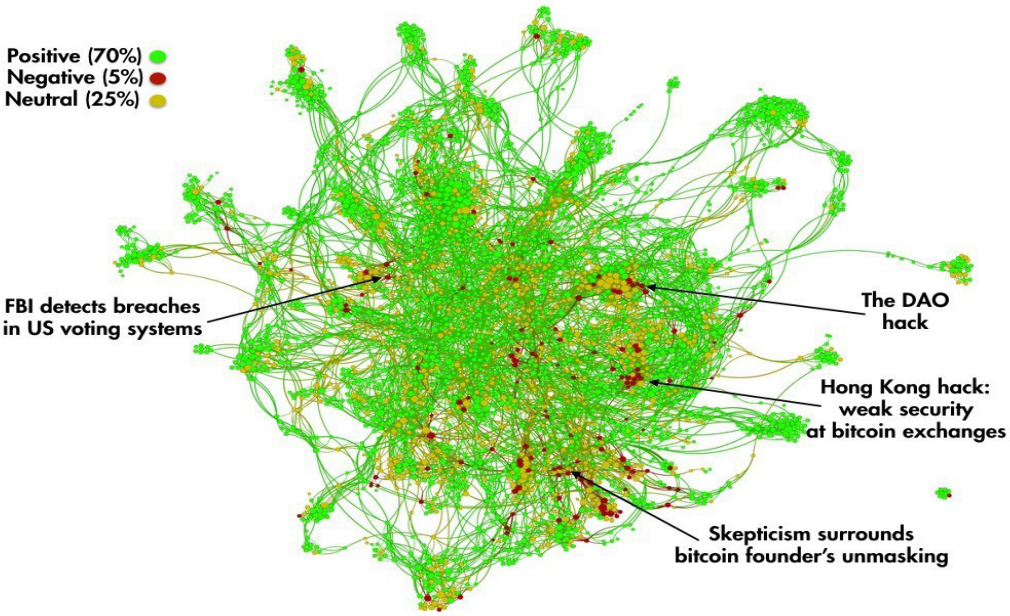
In the digitized era, information transmitted over the network creates direct effects at the level of the psyche, more precisely on our feelings, which can be positive, neutral or negative to a news story at a time. The responses of microfinance service users (as an example Mobile Money & M-Pensa) can be positive, market-accepted or negative, respectively rejected by the market, with their launch in the virtual space. This blockchain technology can be used to test certain financial research results (as well as a service prototype) before these results pass the stage of the transfer of results to the applicative area of microfinance institutions.

Chart no.4. Graphic representation of the reaction to various news through blockchain technology



Source:https://www.weforum.org/agenda/2017/04/5-infographics-that-explain-one-year-of-blockchain-news/ (data of access 28/04/2017)

Digital technologies are experiencing a tremendous speed of innovation in the financial realm, so Blockchain technology is said to be in line with the specifications of experts at the World Central Economic Forum for the Next Generation Infrastructure, which could lead us to a first conclusion , that instead of several independent financial applications, a blockchain application and a single global financial group could be built. In April 2017, a global digital finance plan was debated in the World Economic Forum. Today, at the level of the financial institutions, there is a digital "registration card" with information about (the volume of assets, transactions, etc.), but this book is personalized to the identity of each institution. Blockchain technology can simplify and harmonize information at the level of each financial institution by creating a single "registration card" on network nodes and in real time. This could make real-time information about each institution present on the same page at a given time and based on real-time real-time information. Blockchain technology can be considered the new paradigm of financial services, as well as a new technology to avoid financial crises The above findings were based on the conclusions of the Deloitte Report presented in April 2017 within the "World Economic Forum on Disturbing Innovation in Financial Services and Analysis of the Impact of Deploying Registered Distributed Registry Technology in nine Financial Services Sectors".

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