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ASSESSMENT REPORT ON E-COMMERCE AND CASHLESS ECONOMY

MSRP PROJECT, MOLDOVA

January 2021

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ACRONYMS

AML	Anti-money laundering
ACPMS	Agency for Consumer Protection and Market Surveillance
ASYCUDA	Automated System for Customs Data
ATIC	National Association of ICT Companies
B2B	Business to business
B2C	Business to consumer
CRM	Cash Register Machine
ConsEcon	Economic Council to the Prime-Minister of Moldova
CS	Customs Service
CTIF	Center of Information Technology in Finance
ECB	European Central Bank
EGov	E-Governance Agency
EU	European Union
GoM	Government of Moldova
KYC	“Know Your Client” mechanism
MIEPO	The Moldovan Export and Investment Promotion Organization
MoEI	Ministry of Economy and Infrastructure
MoF	Ministry of Finance
MSRP	Moldova Structural Reform Program
NBM	National Bank of Moldova
NCFM	National Commission of Financial Market
NCPDP	National Center for Personal Data Protection
ODIMM	Organization for Small and Medium Enterprises Sector Development
OPCML	Office for Prevention and Combating of Money Laundering
POS	Point of Sale (usually, device)
PSD2	Payment Services Directive 2 (European Union)
PSP	Payment Service Provider
RM-UE	Association agreement between European Union and the Republic of Moldova
SEPA	Single Euro Payments Area
SIS	Security and Intelligence Service
SPACE	Study on the Payment Attitudes of Consumers in the Euro Area
STISC	Information Technology and Cyber Security Service
STS	State Tax Service
USAID	United States Agency for International Development
VAT	Value Added Tax

EXECUTIVE SUMMARY

In a digital world era, e-commerce is a top priority on the authorities' agenda since they are aware that it offers a radically new way of conducting commercial transactions and is already a global driver of growth and economic development.

USAID, through the Moldova Structural Reform Program (MSRP), commissioned for carrying out analysis of all constraints and costs related to creating and maintaining an online shop in Moldova and identify effective and efficient solutions to eliminate limitations and reduce costs, including those related to the regulatory framework, enforcement, transparency and awareness, and those of non-regulatory. On the other hand, an analysis of general data about electronic payments and measures to promote them, and all constraints, incentives, and costs affecting electronic payments (including P2P solutions).

The project was commenced in November 2020, with a team comprising local experts. Due to COVID-19 restrictions, a limited amount of time, the vast area of analysis, and the requirements of "quick-fix" solutions for a researched areas, the study may not cover all the aspects of the studies topics, and it will require more in-deep analyses on some findings and conclusions.

The authors' team would like to express its gratitude for all stakeholders that agreed to share their visions, challenges, and core information on the researched topics, including, but not limited to Public Authorities, Payment Providers (including banks and PSPs), Logistics Companies, Marketplace Administrators, and of course e-commerce Merchants.

Digital transformation impacts financial payments a lot; innovative payment services are starting to provide alternative solutions for classic payment systems created, traditionally, by banks. The public authorities' leading role is to ensure that people will have a chance to choose a payment system they prefer based on their business models and personal preferences by providing equal regulatory possibility for everyone.

For SMEs, e-commerce is an excellent possibility to start a business with the less initial investment. There is no rent for commercial spaces. There is no need for costly reparations of the shops; there is no need for a salesperson, no training for them. At the same, due to the main features of e-commerce: transparency, speed, real-time feedback, the merchant should invest more time and financial resources in following three fields: accounting, taxation, and legal. And it should be done from the 1st day of the launching of its e-commerce or marketplace.

A cashless economy is an economic system where a small amount of cash is used in transactions. It is based on transactions made by credit cards, debit cards, wallets, or digital modes. While Mobile Wallet refers to mobile wallets or digital payment apps, Plastic Money involves debit/credit cards across swiping machines and POS terminals. E-commerce through POS terminal and dedicated web pages should be analyzed through 4 zones: customer zone, merchant zone, bank zone, international payment system zone.

Based on the analysis of international and regional context and concerning realities in the Republic of Moldova, the e-commerce chain have been structured in 4 blocks: Decision to create an online shop; Payment Solutions; Logistics; Reporting and other compliance measures, which becomes the main parts of this Report.

An merchant should be ready that e-commerce is more transparent – everybody knows about your prices and special offers, including your competitors, your prices are compared permanently and, in a few seconds; more competitive – mostly when we speak about consumer products; if the customer is waiting on your webpage more than on your competitor's webpage, you lose him. There is no possibility to provide to customer coffee or small chat regarding the weather. Therefore,

automatization of your processes, real-time information regarding good's stock becoming crucial for e-commerce business.

ConsEcon's Electronic Payment Survey was conducted in May 2019 and covered some critical questions for e-commerce and how the business community perceives it. Based on the Survey, the top five the most vital impediments in the development of e-commerce in Moldova are Interchange fee; Merchant fee; Law infrastructure of POS (SME); Habits connected to the cash; fear to pay other than cash-based. As a result in 2020, MEI developed a Roadmap to boost digitization of the national economy and development of electronic commerce, which targets the main systemic constraints facing the business community in the G2B, B2B, and B2C interaction process.

Decisions regarding logistic channels should be taken based on clients' location and based on the goods' nature. The main issue on the logistics is that more than 50% represents cash-on-delivery payemnts and based on the current regulation, the courier should be ready to have at least two devises: a cash register machine and POS terminal. As the result it represent additional expenses for logistic company through procurement of such devices for each courier and as the result additional time spent on delivery.

Post services have no digitized their process, and a lot of the duplications of the paper document with different needs are created.

There was no provider of the fulfillment and smart logistic in Moldova before November 2020.

For export activity, the merchant should consider: the limited offer of the post logistics; custom clearance on export; custom clearance in the destination country. Therefore assocaiton with competitors for enetreing on the new markets (outside Moldova) could generate addditional revenues and higher profits through reducing delivery costs, customs clearence – bulk procurement creates additional savings, higher profits.

The cashless economy may accelerate even faster in countries where pre-pandemic adoption was already high. Simultaneously, in the regions where traditional bank POS terminals infrastructure is not very developed, with a widespread internet worldwide, and with easy access and use solutions directly in cellphones, due to financial inclusion, a cashless economy could experience a new wave.

According to the World Bank Group, digital financial services may also help break down one of the remaining impediments to full financial inclusion: the informal nature of many businesses worldwide.

To achieve the mentioned Goal, Four "C" principles should be followed: *convenient* – it should be comfortable and proper to operate with; *cost-efficient* – it should be cheaper than another way of operating; *common* – there should be a lot of knowledge about how everything works; *custom* – people should get used with this kind of modus operandi.

One of the most significant sources of cash in the economy comes from individuals and their activities. There is a general tendency that if an individual is paid by cash – (s)he will try to spend that money in the places where cash is a common rule (markets, small next-door shops, and so on). On the other hand, if an individual would find that it is much easy and safe to use electronic payments (either cards or any of the alternatives offered by PSPs) or would not have another choice than to make an electronic payment for a purchase (s)he will consider operating more electronically. More than that, if a habit of using electronic payments is developed, a person will look for the places where it is possible to use them or claim for them at the marketplace or small next-door shops.

Thus, some simple measures should be taken to ensure the rule expressed before will work: the cash source should be tackled (salaries, other payments to individuals); how individuals make payments should be tackled. (next-door shop and markets, payments to the budget like taxes and fees, payments for services provided by state or local bodies, Peer to Peer transactions, and so on).

The link between business activity and cashless should also be tackled.

A brief presentation of the Matrix of Recommendations is presented further, divided based on:

- **the type of recommendation:**

LEGAL AMENDMENTS		REGULATIONS	
CH1/1	Definition of e-commerce	CH2/3	eKYC Guidance or Acceptance Rules
CH2/4	Adjust of legal regulations to improve customer experience	CH3/1	Transparency in the policy of opening an account and in e-commerce solutions
CH3/3	Subvention and Cashback Scheme (SCS)	CH3/2	Cap on rollover deposits for e-commerce
CH3/5	Supporting financial funds for payment solutions and other Fintech ideas	CH3/4	A single document for the transaction (POS and CRM)
CH4/2	Day-by-day workers regime for courier services	CH3/8	Causes of rejection to process the merchant's request should be published
CH4/3	Training (certifications) on Customs procedures for companies		
CH5/1	Rethinking of the local tax for e-Commerce and obligation of the notification of the trading commencement	GUIDANCE	
CH5/2	Electronic signature facilitated by Posta Moldovei	CH2/1	Guidance for merchants and customers on e-commerce
CH5/3	Automatic update of e-signature	CH2/2	Guidance on the revision of the customers' electronic consent
CH6/1	e-Bon fiscal issued by "Fiscal Gateway"	CH2/3	eKYC Guidance or Acceptance Rules
CH6/2	Adjust Patent for e-commerce	CH5/4	An accounting and tax guide on e-commerce including payment solutions
CH6/3	Adjust independent activity for e-commerce	OTHER	
CH6/4	Online payment systems mandatory for individual entrepreneurial activity	CH1/2	Dedicated courses in e-commerce
CH6/6	Wages paid electronically at the convenience of employees	CH3/6	"Domestic" special regime
CH6/7	Other sources are going electronically with a threshold	CH3/7	Special interchange fee for some transactions
CH6/8	No discounts for cash payment	CH3/9	Implementing of the FinTech Hub
		CH3/10	Elaboration of the concept of a "SANDBOX" mechanism
		CH4/1	IOSS registration for export in EU by Made in Moldova
		CH4/4	Obtaining status of the Authorized Economic Operator (A.E.O.)
		CH4/5	Implementation of the Customs Data Systems
		CH6/5	Moldovan Education and Financial Inclusion Strategy (MEFIS)

- **responsible authority:**

MoF		NBM	
CH3/3	Subvention and Cashback Scheme (SCS)	CH2/1	Guidance for merchants and customers on e-commerce
CH3/4	A single document for the transaction (POS and CRM)	CH2/3	e-KYC Guidance or Acceptance Rules
CH3/5	Supporting financial funds for payment solutions and other Fintech ideas	CH3/1	Transparency in the policy of opening an account and in e-commerce solution
CH3/7	Special interchange fee for some transactions	CH3/2	Cap on rollover deposits for e-commerce
CH3/9	Implementing of the FinTech Hub	CH3/6	"Domestic" special regime
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CH4/2	Day-by-day workers regime for courier services	CH3/8	Causes of rejection to process the merchant's request should be published
CH4/3	Training (certifications) on Customs procedures for companies	CH3/9	Implementing of the FinTech Hub
CH4/5	Implementation of the Customs Data	CH3/10	Elaboration of the concept of a

CH5/1	Systems Rethinking of the local tax for e-Commerce and obligation of the notification of the trading commencement	CH4/5	“SANDBOX” mechanism Implementation of the Customs Data Systems
CH5/4	An accounting and tax guide on e-commerce including payment solutions	CH6/4	Online payment systems mandatory for individual entrepreneurial activity
CH6/1	e-Bon fiscal issued by “Fiscal Gateway”	CH6/5	Moldovan Education and Financial Inclusion Strategy (MEFIS)
CH6/2	Adjust Patent for e-commerce	MoEI	
CH6/3	Adjust independent activity for e-commerce	CH1/2	Dedicated courses in e-commerce
CH6/4	Online payment systems mandatory for individual entrepreneurial activity	CH3/5	Supporting financial funds for payment solutions and other Fintech ideas
CH6/5	Moldovan Education and Financial Inclusion Strategy (MEFIS)	CH4/2	Day-by-day workers regime for courier services
CH6/6	Wages paid electronically at the convenience of employees	CH5/1	Rethinking of the local tax for e-Commerce and obligation of the notification of the trading commencement
CH6/7	Other sources are going electronically with a threshold	CH6/2	Adjust Patent for e-commerce
CH1/1	Definition of e-commerce	CH6/3	Adjust independent activity for e-commerce
CH2/4	Adjust of legal regulations to improve customer experience	CH3/8	Causes of rejection to process the merchant's request should be published
STS		CH6/4	Online payment systems mandatory for individual entrepreneurial activity
CH3/4	A single document for the transaction (POS and CRM)	CH6/8	No discounts for cash payment
CH5/4	An accounting and tax guide on e-commerce including payment solutions	ACPMS	
CH6/1	e-Bon fiscal issued by “Fiscal Gateway”	CH2/1	Guidance for merchants and customers on e-commerce
CS		CH6/1	e-Bon fiscal issued by “Fiscal Gateway”
CH4/3	Training (certifications) on Customs procedures for companies	CH6/8	No discounts for cash payment
CH4/5	Implementation of the Customs Data Systems	ODIMM	
NCPDP		CH3/5	Supporting financial funds for payment solutions and other Fintech ideas
CH2/2	Guidance on the revision of the customers' electronic consent	CH1/2	Dedicated courses in e-commerce
CH2/3	eKYC Guidance or Acceptance Rules	MIEPO	
CH2/4	Adjust of legal regulations to improve customer experience	CH4/1	IOSS registration for export in EU by Made in Moldova
OPCML		ATIC	
CH2/3	eKYC Guidance or Acceptance Rules	CH3/9	Implementing of the FinTech Hub
NCFM		CH3/10	Elaboration of the concept of a “SANDBOX” mechanism
CH3/9	Implementing of the FinTech Hub	POSTAL OPERATORS	
CH3/10	Elaboration of the concept of a “SANDBOX” mechanism	CH4/4	Obtaining status of the Authorized Economic Operator (A.E.O.)
		CH4/5	Implementation of the Customs Data Systems

I. STATUS-QUO

A cashless economy and e-commerce are two parts of the same coin: there is no chance for one to be developed without the other. Of course, a cashless economy seems to be a little broader concept, but here we are referring more to those two connections. By being part of the digital era and its continuous development, Government authorities are putting more and more emphasis on these topics to be ready to explore the opportunities and face the challenges associated with them.

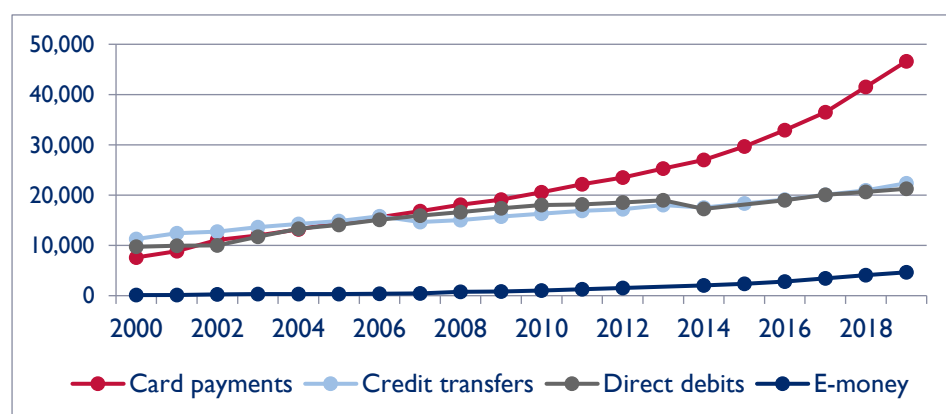
Based on the research of the Global Trade Magazine¹, according to Statista, 259 million Americans routinely bought products online in 2018. But as ever more business is transacted online, financial services and “fintech” companies have built and continue to improve a secure payments ecosystem that consumers and companies can be confident will protect their most vital assets: their private information and money. Pretty soon, we might not need to pull out a physical card as our credit card information gets linked with mobile payment systems. All you need is your finger, your phone, or a watch – items you probably already have on hand, literally. As more consumers adopt this convenience, “e-wallets” will eventually replace cash altogether.

On the regional level, the main trends are dictated by the European Union and its politics regarding cashless economy and e-commerce.

The recently launched European Payments Initiative seeks to replace national schemes for the card, online and mobile payments with a unified card and digital wallet that can be used across Europe. To succeed, it will need to overcome the existing fragmentation of national card schemes to cover the whole EU and offer a credible alternative to global players.

Another critical element of the strategy developed by ECB is the fast deployment of instant payments, which allow households and businesses to get access to their funds immediately – as the payment is completed – and in central bank money, eliminating any financial risk for either the payer or the payee. In 2018 the Eurosystem introduced a powerful platform for the continuous settlement of instant payments (TARGET Instant Payment Settlement, or TIPS), putting the euro area at the forefront of retail payments. To make instant payments available to everyone in Europe, it has been recently taken significant steps to ensure pan-European instant payments by the end of 2021 via TIPS.

Figure I. Use of electronic payment instruments in the euro area: 2020 update (number of transactions per year, in millions)



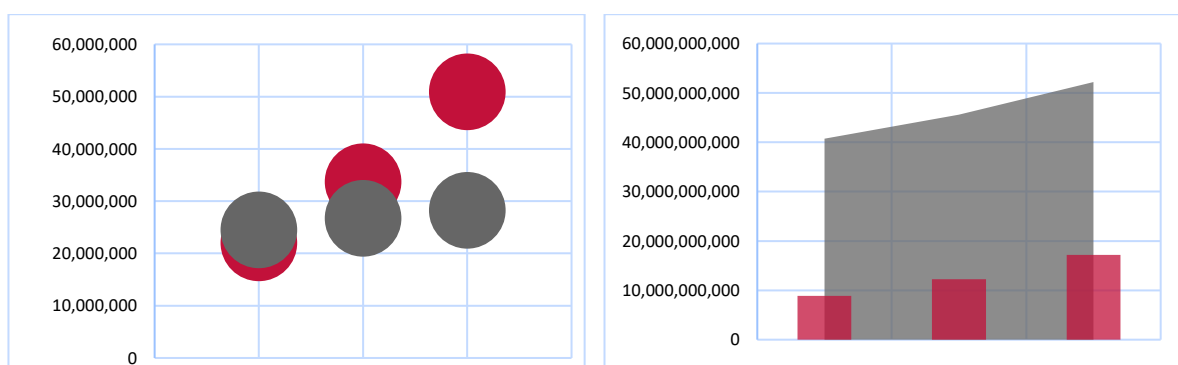
Source: ECB webpage

¹ <https://www.globaltrademag.com/toward-a-global-cashless-economy/>

In 2019, the ECB conducted a study on the payment attitudes of consumers in the euro area (hereafter referred to as SPACE)². Almost half (49%) of the respondents stated that they preferred using cards or other cashless payment, whereas 27% said they chose cash (down from 32% in 2016), while the remaining 24% said they were indifferent. Asked about the importance of money, 55% of the respondents stated that it is essential for them to have still the option to pay with cash in the future. The SPACE results also reveal respondents use that money to top up their wallets, as an alternative way of savings for precautionary motives (e.g., as a safeguard against events such as electronic payment outages or crises), since 34% of the respondents stated that they stored cash at home or in a safe place.

Based on the information available on the National Bank of Moldova (NBM) webpage, the number of non-cash payments continues to increase rapidly (+49%). Still, we can see that based on the value indicator, it remains far away from cash withdrawal. Compared to the EU average (151), Moldova registered 19 payments per capita per year. Proximity cards accounted for 82% of the cards issued in 2019 and 69.2 of the total shares of cards held.

Figure 2. Comparative analysis between the number (top) and value (bottom) of cash withdrawals (grey) vs. non-cash payments (red) in 2017-2019



Source: NBM webpage

There are three issued cards (0.71) for every four citizens compared to 1.5 cards per one person, which is EU average in 2019, and there are 8 POS terminals for 1000 citizens to 29.6, which is EU average.

To understand better how e-commerce processes are taking place in Moldova, the authors consult local studies provided in this area. It was also looked at the cashless economy research due to the strong connections between those two.

The Ministry of Economy and Infrastructure (MoEI) developed a Roadmap to boost digitization of the national economy and development of electronic commerce³, which targets the main systemic constraints facing the business community in the G2B, B2B, and B2C interaction process. The document includes topics that need a quick approach and an immediate solution, which would help the business community overcome COVID-19 pandemic's consequences more easily. It contains 37 priority issues that need to be addressed.

The Economic Council implements the Roadmap to the Prime-Minister of Moldova (ConsEcon) with the National Association of ICT Companies (ATIC) and other business and professional associations.

² ECB Study on the payment attitudes of consumers in the euro area (SPACE) <https://www.ecb.europa.eu/pub/pdf/other/ecb.spacereport202012~bb2038bbb6.en.pdf>
³ <https://consecon.gov.md/en/economy-digitization/>

E-commerce in the Republic of Moldova is regulated mainly by the Law on e-commerce 284/2004, Civil Code 1107/2002, Law on E-Signatures 91/2014, Law on Data Protection 133/2011, Law on Anti-Money Laundering 200/2018, Law on consumer protection 105/2003, Law on postal communications 36/2016, NBM Decision on Payment Services 114/2012 and other relevant acts.

Even if there is a definition in the Law on e-commerce, there is still a lot of ambiguity around the definition of e-commerce. That leads to misunderstandings and misapplication of some critical provisions that relate to this definition.

In 2020, USAID, through the Moldova Structural Reform Program (MSRP), commissioned a **rapid review of the e-commerce landscape in Moldova**⁴ with the view of quickly identifying any roadblock and offering its support for the development of e-commerce in the country.

Other relevant studies on e-commerce or cashless economy are presented further and serve as a starting point in authors' investigations on relevant subjects.

Table 1. Relevant studies provided on e-commerce and cashless economy in Moldova

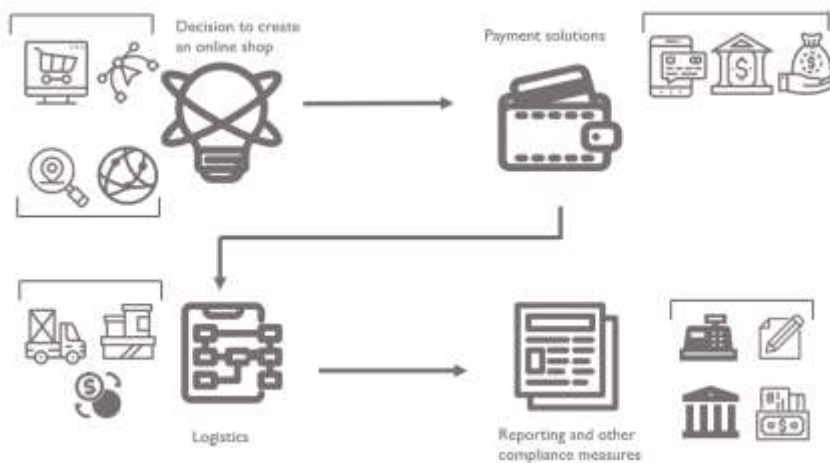
NAME OF THE REPORT	PROVIDER / BENEFICIAR, THE YEAR OF ISSUING	HOW CAN BE FOUND
Rapid review of the e-commerce landscape in Moldova	USAID MSRP	https://ict.md/wp-content/uploads/2020/07/Moldova-Rapid-ECommerce-Review.pdf
ConsEcon's Electronic Payment Survey and Electronic Payment Concept: The Impact	ConsEcon 2019	
ATIC Proposals on digitalization Post-COVID-19	ATIC 2020	ATIC-Proposals-on-digitalization-Post-COVID-19.pdf
Recommendations proposed for eCommerce environment harmonisation in the EaP countries: gap analysis in three areas - ecosystem, legal framework and standards - for the Republic of Moldova	EU4Digital 2020	
COVID Matrix	ConsEcon Team with the support of EBRD 2020	https://consecon.gov.md/wp-content/uploads/2020/12/COVID-19-Pandemic-Impact-Study-on-Economic-Sectors-and-Policy-Matrix.pdf
MD21Output 3 Shadow Economy	PriceWaterhouseCoopers (PwC) for the Ministry of Finance sponsored by UK Good Governance Fund, 2017	
The informal economy "La Punct". Reducing corruption by developing cashless payments	Independent Think-Thank Expert Grup 2019	www.expert-grup.org
The limited use of non-cash payments in Moldova: Diagnosis and policy options	German Economic Team Moldova 2016	https://www.get-moldau.de/wordpress/wp-content/uploads/2016/06/PP_02_2016_en.pdf
Leveraging Digital Financial Solutions To Promote Formal Business Participation	World Bank Group 2019	http://documents1.worldbank.org/curated/en/486541556177550649/pdf/Leveraging-Digital-Financial-Solutions-to-Promote-Formal-Business-Participation.pdf

Source: Compilation made by the authors

⁴ <https://ict.md/wp-content/uploads/2020/07/Moldova-Rapid-ECommerce-Review.pdf>

Based on the analysis of international and regional context and concerning realities in the Republic of Moldova, authors structured the e-commerce chain in 4 blocks, as shown in Figure 3.

Figure 3. The structure of e-commerce chain by blocks



Source: Made by the authors

In the "Decision to create an online shop" block, there are two primary questions that should be responded to by a merchant: (1) if (s)he would like to go just inland or to consider international trade also and (2) if (s)he would like to use an existing infrastructure of a marketplace or would like to go for an own webpage. Also, the ones who are going online should estimate resources on marketing in any phase of the activity.

In the "Payment solutions" block, the main question is about the way you would like to get your money from selling online and opportunities that you are offering to your client: either it is a cash-by-delivery method, or it is through the bank's POS terminals, mobile or online banking, or it is through innovative FINTECH solutions like an e-wallet. It is also about the costs that are associated with the payment process. To get the right touch of the field's expenses, a survey was developed and were ask payment operators.

In the "Logistics" block, the main issues are connected with product storage solutions, delivery of goods and services inland, and international trade, including postal service and customs related costs and problems. The reimbursement and how it is managed is also an important issue that should be tackled.

In "Reporting and other compliance measures" block is compiled requirements related to bookkeeping and auditing, tax administration related activities, payments related to trans-border trade and customs, required licensing and other actions connected to compliance to a state rule of laws.

ConsEcon's Electronic Payment Survey was conducted in May 2019 and covered some critical questions for e-commerce and how the business community perceives it.

Based on the Survey, the top five the most critical impediments in the development of e-commerce in Moldova are:

- the high value of the bank commission charged per collection by POS by banks (merchant fee)
- the habit (custom) of the population to pay the purchases in cash
- the high value of the interchange fee
- non-acceptance of cards at small merchants / low-value proxies
- fear of the people to pay by card (low degree of understanding and acceptance of the process).

The list of impediments also contains such concerns as the risks of bank card fraud, distrust in the banking system, normative constraints for the development of electronic payments, unwillingness to expose revenues and expenditures to public authorities (STS, OPCML, etc.), the risk of sanctions from the same bodies and so on.

Respondents were also asked to comment on the effectiveness of measures to promote electronic payments generally announced or circulated or some new measures prepared by the ConsEcon Team.

IMPEDIMENTS TO E-COMMERCE IN MOLDOVA (CONSECON SURVEY)

- Interchange fee
- Merchant fee
- Law infrastructure of POS (SME)
- Habits connected to the cash
- Fear to pay other than cash

Based on the Survey, the top five most important measures to develop e-commerce in Moldova are:

- stimulating the development of alternative methods of electronic payments
- promoting small electronic payments by bank card
- introduction of fiscal incentives for electronic payments
- implementation of new electronic payment technologies by mobile phone (mobile - POS terminal or a cash register machine)
- capping the commission applied to merchants.

Other measures that were considered very important and essential are: reducing the burden of fiscal administration and additional administrative responsibilities, establish an obligation to pay the salary only by electronic methods, developing the capacity of cash-in at POS terminals, establishing simplified cashback procedures from merchants, and so on.

To go in-deep what are the main constrains in e-commerce development, authors participated in desk interviews with the representatives from public authorities (NBM, MoEI, MoF, STS, CS, OPCML, NCPDP, ODIMM, and so on) as well as with representatives from PSP (Paynet, Qiwi, BPay, RunPay) and banks (including all three processing centers) (Moldova-Agroindbank, VictoriaBank, FinComBank, Moldindcombank), international payment systems (Visa, Mastercard), marketplaces (AI, Simpals) as well as with business community representatives from food and beverages, textile industry and IT service providers.

2. DECISION TO CREATE AN ONLINE SHOP

Starting a business was never a simple decision, with many questions and issues, and number of such issues are higher when business goes online.

E-commerce is:

- more transparent – everybody knows about prices and special offers, including competitors, prices are compared permanently and, in a few seconds,
- more competitive – mostly when we speak about consumer products,
- faster - if the customer is waiting on the webpage more than on competitor's webpage, he is lost for the merchant. There is no possibility to provide to customer coffee or small chat regarding the weather. Therefore, processes automatization, real-time information regarding good's stock becoming crucial for e-commerce business.

Before the start e-Commerce, the Merchant should have answers to the following questions:

- Who are his customers, where are they located (inside Moldova or outside Moldova)
- What is the marketing budget and strategy?
- Marketplace or eCommerce?
- Payment method (online, cash-on-delivery) and who will payment solution provider
- Automatization and Logistics (ERM, CRM, own courier system, outsourced courier, postal provider, fulfillment services provider)

Inside Moldova vs Outside Moldova

Additionally, to standard issues for local e-commerce, the Merchant should take into consideration the following issues:

- Language and currency of the country,
- Custom clearance issues (export activity),
- Taxation rules of customer's country: threshold for B2C import of post parcels of the country of destination (for example EU countries 22EUR and starting 1st July 2021 it is reduced to 0, Russia 200 EUR, USA 800 USD),
- Payment solutions provider and data protection rules, such as GDPR
- Logistics – low possibility for discounts for small quantities of monthly sales.

Marketing

The marketing budget that includes expenses on SEO (Search Engine Optimization) and SMM (Social Media Marketing) also represents an essential part of the total budget of e-commerce. The merchant should be prepared to spend at least 5% of its monthly sale. For permanent growth for launching the activity, the account could represent also up to 25-40% of the monthly sale.

This is an essential line of the monthly expenses that should be considered.

Marketplace or eCommerce

Marketplace and e-commerce for many beginners in online business mean the same, and yes, both are used for online business purposes. Nevertheless, the approach is entirely different.

The marketplace is an online platform where the website owner allows third-party sellers to sell via the website and directly invoice them. The marketplace owner does not own the inventory, and as a result, does not invoice the customer. The marketplaces provide a place for the seller to meet his

customer and sell to him, similar to what you see in a mall or market ("bazar"). The marketplace invoices the seller as a commission fee or/and a membership fee for its platform.

The e-commerce website is an online store where the merchant sells its products on its website. The merchant owns all the inventory, and the website owner invoices the customer. And it very similar to a retailer shop (Metro, Linella, etc.).

And if marketplaces are always robust and up-and-running (at least they should be) and the seller is not caring about it, e-commerce websites need to be set up and maintained by the seller permanently.

Unfortunately, local producers have no variety of the possibilities in case if he decided to select the marketplaces as the start and it is based on two main issues:

- The limited presence of the global marketplaces
- Limited offer of the national marketplaces

Global marketplace offer is limited due to the fact of Moldova's market size and that most consumers are using the global marketplace for the goods produced outside of Moldova due to the cost and variety of the offers comparing to the local marketplaces.

Due to some issues like the size of the market, development of electronic payments, and some technical issues, currently offer of the marketplaces is limited with:

- <https://totul.online/>
- <https://rozetka.md/>
- <http://al.md/ro/>
- <https://www.elefant.md/>
- <https://mp.agrobiznes.md/>
- <https://999.md/ru/> (used mostly for P2P)

Nevertheless local company SIMPALS developed the possibility to buy an e-commerce website as SAAS (software as a service) – PRICE.MD. Merchant rents website infrastructure and has the opportunity to start his online activity very fast with small initial costs (see price.md). Monthly renting of the website platform for e-commerce starts from 499 MDL per month (799MDL per month, 1499 MDL per month).

Therefore, for the correct selection of the instrument to start, the merchant should take into consideration the following:

- Who are the customer and its location?
- The specificity of the product (standalone product or auxiliary product),
- Existence of brand,
- The volume of the sales
- Startup budget
- Marketing budget

Below is presented comparing marketplaces and e-commerce.

Table 2. Own ECOMMERCE WEBSITE VS MARKETPLACE: TIME AND COST

ACTIVITY	OWN ECOMMERCE WEBSITE COST, EUR	MARKETPLACE COST, EUR
Operating system and site template (The top three e-commerce platforms WooCommerce, Magento, and Shopify – could be used for creating a fast site template)	At least 500	0
Content filling	150	150
Integrating payment systems	At least 250	0
Integrating and automating delivery systems	At least 300	0
SEO development and optimization	At least 500	0
Implementation of the price and stock control system	At least 250	0
Set up pixels, tags, and other modules to reach your social media audience	100	0
Create account and set up the company on Facebook (including Instagram),	150	0
Create and customize Google	150	0
For Facebook/Google marketing, potential leads	Non limited	0
Maintenance	At least 250 pe month	0
Hosting	At least 12 pe month	0
Customer Service	At least 400 per month	0
Time for start	At least 60 days	Up to 10 days (depending on all content is ready from your side)
Marketplace commission		7-20%
Payment solution providers	1.5-3.0%	1.5-3.0%

Source: Made by authors based on <https://a1.md/ro/despre-noi/>

As the result a marketplace solution is a good starting point for beginners without offline business experience or who is fully oriented to the non-Moldova market.

Price.md – could be the right solution for that category of merchants who have experience in an offline business but are still not fully understand online business. They need personalized e-commerce. However, the needs' full specter still is not evident, but they would like to test it with their brand.

And own e-commerce solution – for those who are experienced and know exactly what they want and have the budget and time for it.

Payment method

Usually, e-commerce activity is used following two methods of payment:

- online payment,
- cash-on-delivery (with the possibility to use POS terminal for accepting cards).

More about payments will be described in the following Chapter.

Automatization and Logistics

The delivery time to the customer is one of the main criteria for measuring customer’s satisfaction. Therefore, each minute after accepting the order's payment has a considerable cost for the merchant. That is why it is vital to implement Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) at the beginning of the online sale. The stock management system should be operational in a real-time manner; the accounting software system should be connected to the website. Expenses for automatization of this issue will save time will reduce mistakes and as a result will give the possibility negotiate better tariffs on delivery and on payment solution (low rate of complaints, the low percentage of returns low rates of the canceled orders generates additional economy).

Most of the systems currently provides monthly based fees depending on the number of users. An additional cost for the connection to the website should be taken into account.

Total costs start at EUR 200 (automatization of the stock management using IC ver. 8.3) as setup fee and monthly fees starting from 5 EUR per user per system. Always exists the possibility for the trial period.

Customer Experience

It is also imperative to ensure that the customer will get what he is paying for. A particular chapter in PSD2⁵ is covering Consumer rights. Thus, consumer rights are enhanced, including:

- Reduced liability for non-authorized payments from €150 to €50.
- Unconditional refund right for direct debits in euro for eight weeks.
- Removal of surcharges for the use of consumer credit or debit card.

Based on the EU4Digital Survey, comparing to the EU regulations the national legislation:

(1) does not establish the requirements for providers' terms and conditions of online intermediation services. This measure ensures that business users of online intermediation services and corporate website users concerning online search engines are granted appropriate transparency, fairness, and practical redress possibilities.

(2) does not stipulate that where a provider of online intermediation services decides to restrict or suspend the provision of its online intermediation services to a given business user, it shall provide the business user concerned, before or at the time of the restriction or suspension taking effect, with a statement of reasons for that decision on a durable medium. This measure better protects fairness among national and international traders.

(3) does not require that providers of online intermediation services shall include in their terms and conditions a description of any differentiated treatment which they give, or might provide, about goods or services offered to consumers through those online intermediation services. This measure better protects fairness among national and international traders on marketplaces.

(4) does not require that online intermediation services providers shall include specific contractual terms to ensure that contractual relations between providers of online intermediation services and business users are conducted in good faith and based on fair dealing.

(5) does not require that the providers of online intermediation services shall provide an internal system for handling business users' complaints. This measure would significantly improve dispute resolution mechanisms for national and cross-border traders.

All those provisions should be included in the primary legislation and after that to be imposed to be sure that a person gets exactly what (s)he is paying for.

In discussion with ACPMS, some significant GAPS in Moldova's e-commerce activity were mentioned, such as the need to clarify reimbursement of goods status from the tax administration perspective. Or it seems that there are some misunderstandings in how the cash-register machine should be settled in this case. In this case, if there is not any need to change the normative acts, the detailed explanation should be published either in the General Base of Tax Practice or in an official communiqué that will be used by stakeholders in the documentation of such transactions.

Another addressed issue is how the consumer could handle any complaints on a seller's web page. Sometimes it is a huge problem to find a seller based on his legal address. To tackle this issue, there should be identify a proper government authority that should update the information and apply some enforcement methods and fees if a merchant does not comply with that.

It is very important to organize dedicated courses in e-commerce in order to familiarized interested parties in all particularities, provided by companies involved in every stage.

⁵ Payment Service Directive 2 – described in Chapter 3

3. PAYMENT SOLUTIONS

International and regional experience

Payments play an essential role in the exchange chain by facilitating the relationship between products and services and their values. Thus, payments have a significant role in any economy, either developed or developing. Due to that, the payment system becomes one of the critical elements of commerce and an essential ICT innovation sphere.

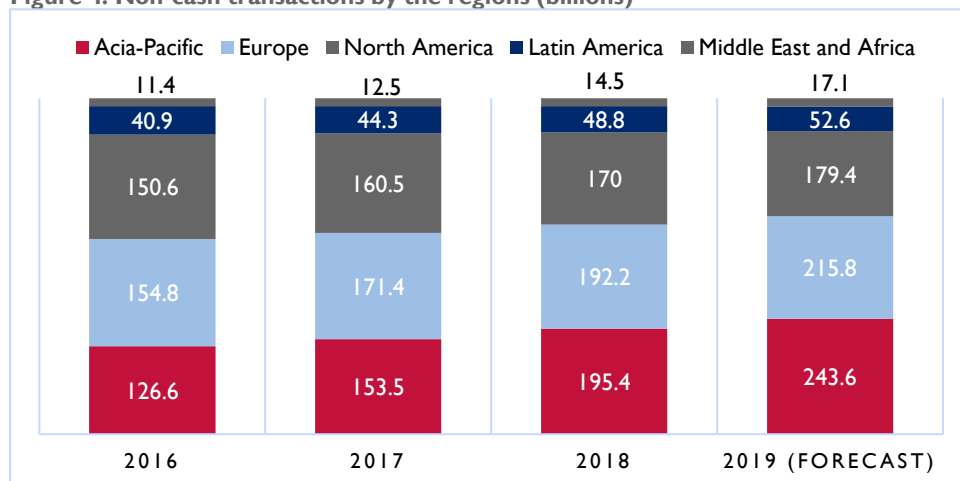
Digital transformation impacts financial payments a lot; innovative payment services are starting to provide alternative solutions for classic payment systems created, traditionally, by banks. The public authorities' leading role is to ensure that people will have a chance to choose a payment system they prefer based on their business models and personal preferences by providing equal regulatory possibility for everyone.

COVID-19 brings its contribution to the people's payment decisions by putting them in the situation to choose innovative solutions that will respect all boundaries and restrictions associated with the pandemic.

Capgemini World Payment Report 2020⁶ states that users drift from traditional modes of payments, with a substantial rise in contactless, QR Code, and digital wallets. According to the same source, a Voice of Customers Survey was conducted, which stipulated that during the COVID-19, 41% of cash users tried a contactless card. On the other hand, 31% who owned a card ad to a digital wallet, the majority cited ease, convenience, and speed as the reasons for usage. Another innovative solution – QR code – was used by 27% of customers, where two out of five customers are above 40.

Nevertheless, adding to this the convenience of online purchase and Card-not-Present transactions, and you end up with a massive, interwoven mesh of potential security gaps that cybercriminals can, and will, exploit. The result, a cascade of cybercrime attacks across the payments industry, with losses expected to reach \$200 billion by 2024.

Figure 4. Non-cash transactions by the regions (billions)



Source: Made by the authors based on Capgemini World Payment Report 2020

⁶ <https://worldpaymentsreport.com/>

It is also interesting that the European market outside the EU recorded double-digit non-cash transaction growth in 2014-2019. The average increase in the Europe region for 2018-2019 is 12.2%, the growth for the EU countries is 6.3%, and for Non-EU countries – 19.5%.

As for e-commerce payment methods, the dominants are still Credit card (62.4%), Debit card (52.7%), and Internet banking (48.9%). But it is followed closely by mobile payment (digital wallet, QR code) (46.1%), cash on delivery (33.5%), Buy now, pay later (30.1%), and Retailer wallet (29.6%).

E-COMMERCE PAYMENT METHODS

Credit card (62.4%), Debit card (52.7%), and Internet banking (48.9%), Mobile payment (digital wallet, QR code) (46.1%), cash on delivery (33.5%), Buy now, pay later (30.1%) and Retailer wallet (29.6%)

As mentioned, and briefly explained in STATUS-QUO Chapter, the main trends are dictated by the European Union and its politics regarding the cashless economy and e-commerce.

According to the European Union official webpage⁷, EU Directive 2015/2366 on EU-wide payment services⁸ (**Payment Service Directive 2 — PSD2**) (a) provides the legal foundation for the further development of a better integrated internal market for electronic payments within the EU; (b) It puts in place comprehensive rules for payment services*, intending to make international payments (within the EU) as easy, efficient and secure as payments within a single country; (c) It seeks to open up payment markets to new entrants leading to more competition, more excellent choice and better prices for consumers and (d) It also provides the necessary legal platform for the Single Euro Payments Area (SEPA).

The directive establishes a clear and comprehensive set of rules that will apply to existing and new innovative payment services providers. These rules seek to ensure that these players can compete on equal terms, leading to greater efficiency, choice, and transparency of payment services while strengthening consumers' trust in a harmonized payments market.

The directive also aims to open up the EU payment market to companies offering consumer- or business-oriented payment services based on access to information about the payment account, mainly: (a) account information services which allow a payment service user to have an overview of their financial situation at any time, allowing users to manage their finances better; (b) payment initiation services which are services to initiate an order at the request of the payment service user for a payment account held at another payment service provider.

Single Euro Payments Area (SEPA)⁹ establishes a single set of tools and standards that make cross-border payments in euro as easy as national payments. It harmonizes the way cashless euro payments are made across Europe. It allows European consumers, businesses, and public administrations to make and receive the following types of transactions under the same conditions, credit transfers, direct debit payments, and card payments. This makes all cross-border electronic payments in euro as easy as domestic payments. SEPA covers 36 countries – the whole of the EU. It also applies to euros in other European countries: Andorra, Iceland, Norway, Switzerland, Liechtenstein, Monaco, San Marino, and Vatican City state.

Moldovan experience

Currently, accepting of the online payment is limited to 4 banks (Moldova-Agroindbank,

⁷ www.ec.europa.eu

⁸ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32015L2366>

⁹ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/consumer-finance-and-payments/payment-services/single-euro-payments-area-sepa_en

Moldindconbank, Victoriabank, and FinComBank) and few PSP providers in Moldova (Paynet, Qiwi, BPay, RunPay - Paymaster). Such limited offer provides the exact cost of the online payments as such costs are transparent, and it is consisted of: merchant fee; rollover deposit; time for connection of webpage to bank's system and so on.

Based on the information that is available on the National Bank of Moldova (NBM) webpage, the list of payment systems supervised by the entity includes: Automated interbank payment system (SAPI); The structure of the single central securities depository (SDCU); Payment instruments (payment cards, credit transfers, direct debit); Automated remote service systems (SADD); Remittances.

The Automated Interbank Payment System (SAPI)¹⁰ is the system through which interbank payments in Moldovan lei are made on the Republic of Moldova's territory. SAPI is a hybrid system composed of the real-time gross settlement system and the net settlement system.

Participants in the system are the NBM, 11 banks, the State Treasury of the Ministry of Finance, Tiraspol Cash and Settlement Center, the Central Unique Depository, the Deposit Guarantee Fund in the banking system, and 2 PSPs (Paynet and BPay).

Table 3. Ranking of banks according to the share of cards held and the value of operations performed with payment cards issued in Moldova and the acceptance network in 2019

BANK NAME	THE SHARE IN THE TOTAL NUMBER OF CARDS HELD	SHARE IN THE TOTAL NUMBER OF OPERATIONS	THE SHARE IN THE TOTAL VALUE OF OPERATIONS	SHARE IN THE POS ACCEPTANCE NETWORK
MOLDINDCONBANK	36.7%	34.7%	31.1%	25.3%
MOLDOVA-AGROINDBANK	28.2%	26.7%	29.0%	34.0%
VICTORIABANK	17.4%	22.3%	20.4%	29.4%
MOBIASBANCA-OTP GROUP	7.3%	7.8%	8.0%	0.0%
FINCOMBANK	3.8%	2.7%	3.2%	4.6%
EXIMBANK	3.1%	2.3%	2.8%	6.5%
ENERGBANK	1.9%	1.3%	1.6%	0.0%
BANCA COMERCIALA ROMANA	0.5%	1.0%	1.1%	0.0%
EUROCREDITBANK	0.4%	0.3%	0.4%	0.2%
PROCREDITBANK	0.3%	0.5%	2.0%	0.0%
COMERTBANK	0.3%	0.4%	0.4%	0.0%

Source: NBM webpage

SAPI is operated and administered by the NBM, and the fee policy applied to system participants is based on the principle of cost recovery. Such an approach allows maintaining a minimum level of fees, the size of which can be revised following the calculation (on an annual basis) performed by the NBM of expenditures and revenues related to the operation of SAPI.

To carry out payment transactions, the following cashless payment instruments are used on the Moldovan market: payment card, credit transfer, direct debit, and electronic money (only by electronic money issuing companies). According to the data reported to the NBM, the most used payment instrument is the payment card, which is mainly used by individuals, followed by credit transfer (CT). CT has the highest share in terms of value than other non-cash payment instruments, as legal entities mainly use it.

According to EU4Digital: supporting the digital economy and society in the Eastern Partnership eCommerce Report, speaking about payment methods usage, accepted payment methods are Visa/Mastercard; digital wallets; domestic bank credit/debit card; cash-on-delivery (most common). There are not standard payment methods like PayPal and Alipay; bank transfer; MPay, the

¹⁰ <https://www.bnm.md/ro/content/extras-din-conceptul-privind-dezvoltarea-domeniului-de-plati-din-republica-moldova>

governmental payment service, is implemented to facilitate payments for services provided by public service providers.

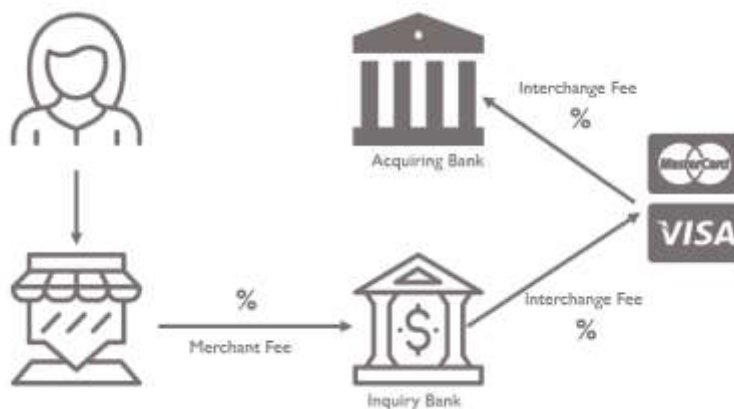
The same source states that some of the reasons digital wallets are not common are: (a) Out of control of the local tax authorities. (b) Create an additional burden on businesses in tax reporting. (c) Inability to receive money from the PayPal accounts registered in the EU while using PayPal account registered in Moldova. (d) High fees for international payment services charged by the bank: online payments more expensive than cash (for each transaction, the retailer may be charged up to 4% + there are minimum fixed fees, collected by the National Bank of Moldova). (e) Also, SMEs are obliged to hold a bank deposit of about 10-15% of the turnover to cover the transactional risks.

The same report concludes that different practices than in the EU are used in Moldova. Although some of the most common payment methods in Moldova are aligned with the EU, consumers prefer the cash-on-delivery payment method for e-commerce transactions. This is not supported by most of the global marketplaces. Also, digital wallets are not ordinary in Moldova for e-commerce transactions, where the only local solution (i.e., Paynet) is widespread. Tax authorities face challenges to control transactions from digital wallets (e.g., PayPal), and businesses face additional complications to report taxes from such transactions.

E-commerce through POS terminal and dedicated web pages

For better understanding of the role of every stakeholder connected to payments involved in e-commerce transactions, an infographic has been elaborated.

Figure 5. E-commerce through POS terminal and dedicated web pages



Source: Made by the authors

According to the presented infographic, following zones could be identified:

a) customer zone

From the customer perspective, everything that is connected with e-commerce should follow a Four "C" principle:

- convenient – it should be comfortable and proper to operate with
- cost-efficient – it should be cheaper than another way of operating
- common – there should be a lot of knowledge about how everything works
- custom – people should get used to this kind of modus operandi.

The customer will follow this simple algorithm when making decisions on e-commerce. It is essential here to ensure that the operational infrastructure lets the customer choose out of several possibilities of payments (bank card, e-wallet, QR-code, cash-in POS terminal) and to have a chance to choose electronic payment versus cash payment. To boost this one, it should also consider some tax incentives for the customer; in the PwC Report on Shadow Economy for the MoF, tax incentives were considered one of the most critical measures to promote a cashless economy.

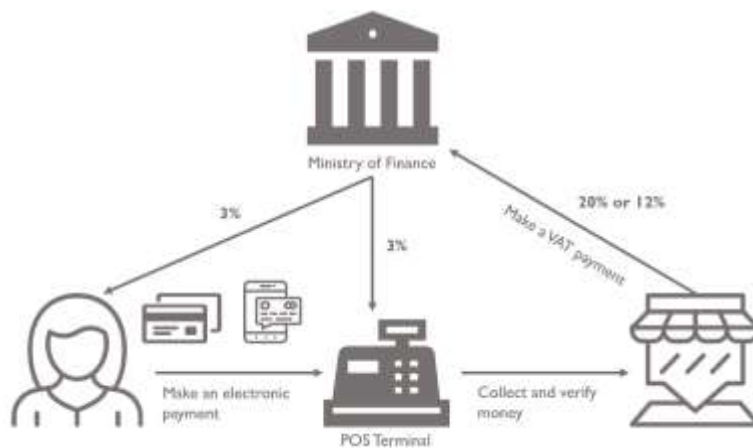
There is also some cashback that a customer could receive by being part of e-commerce and using the electronic payment system. When speaking about tax incentives, VAT diminished tax usually comes to the discussions with the stakeholders.

For example, in their Report¹¹, Expert Grup proposes assessing the possibility of granting a tax rebate to consumers who use electronic payments. According to the Report, some states have resorted to giving a VAT reduction of 1-2 percentage points for each transaction paid with a bank card. Although this could result in cuts in budget revenues in the short term, such an initiative does not have to be permanent. From the other hand, German Economic Team report¹² suggest a 4% reduction of VAT.

In the authors' opinion, because e-commerce is a type of commerce that regularly substitute, it is clear why regulatory bodies are not eager to go for that. More than that, no special regime regarding VAT tax rate for e-commerce is applicable in the EU and based on RM-EU; to harmonized VAT tax rates, Moldovan Authorities should consult the legal framework of the EU.

Based on that, instead of providing reduced VAT rate for e-commerce, the cashback to the account of individual persons who are using electronic payment methods should be implemented. It should also be cash compensation to the merchant fees to make the merchant more eager to go for electronic payments. To exclude any external influences on the process of compensation and cashback, there should be preferably done automatically. It is important to establish an agreement between Ministry of Finance and banks/international payment systems to delegate payment of cashback to them.

Figure 6. Subvention + cashback scheme for stimulating the use of electronic payments



Source: Made by the authors

There is also some issue with the confirmation of a transaction. “Bon fiscal” that is traditionally issued by cash register machine become a problem in the era of e-commerce. On the other hand, it could not be ignored that a proven document, either bon fiscal or an invoice, should be provided to ensure that the consumer’s rights will be protected. The solution is in “e-Bon fiscal” issued by “Fiscal Gateway” computer system - hardware and software platform, whose construction includes an

¹¹ The informal economy, "La Punct." Reducing corruption by developing cashless payments – www.expert-grup.org

¹² https://www.get-moldau.de/wordpress/wp-content/uploads/2016/06/PP_02_2016_en.pdf

intermediate node for real-time transmission of management and financial information to the execution of the payment operation from cash payment terminals, through secure digital channels, in the information system of the State Fiscal Service, ensuring the protection of working algorithms and data against unauthorized changes. It should be mentioned that “Exclusion of the obligation to issue a paper voucher for online transactions” is noted that one of the ATIC Post-COVID recommendations¹³. Legal and normative framework should be elaborated in order to get it done.

In the authors’ opinion, guidance should be elaborated by ACPMS to ensure that both customers and merchants are knowledgeable about all the requirements and tips that should be considered here.

b) merchant zone

As it was mentioned before in ConsEcon’s Electronic Payment Survey, the high value of the bank commission charged per collection by POS by banks (merchant fee) and non-acceptance of cards at small merchants / low value proxies. One of the top 5 solutions that was voted by participants is capping the commission applied to merchants.

As a part of this report, the authors have elaborated a **Survey named ConsEcon-MSRP questionnaire on commissions applied in e-commerce and cashless economy** (The Survey) that was submitted by banks and PSPs.

Figure 7. Merchant Fee (including Interchange Fee)



Source: Made by the authors

Based on the presented information, merchant fee varies from 0.5% per transactions to 3.0% depending on the merchant’s type, the expected level of payment, and other relevant for banks information.

Interchange fee being considered one of the top 5 problems that participants to the ConsEcon’s Electronic Payment Survey identified.

¹³ <https://ict.md/wp-content/uploads/2020/07/ATIC-Proposals-on-digitalization-Post-COVID-19-1.pdf>

Based on Final Report regarding the data collection on merchants' costs of processing cash and card payments (2015)¹⁴, for large merchants - accounting for at least half of the card transactions in the EU 28 - the analysis found that in the medium-term, the merchant indifference thresholds stay well below the benchmarks applied in the settlements and the Interchange Fee Regulation and range between 0.06% and 0.16% for debit and between -0.04% and 0.13% for credit cards. In the short-term, the indifference benchmarks for debit and credit cards are slightly lower, while looking ahead more long-term, they are slightly higher. The data collected did not permit drawing conclusions for all merchants, beyond large merchants.

Table 4. Market share of payment card schemes in 15 countries in Europe in 2018

COUNTRY	DOMESTIC SOLUTIONS	VISA	MASTERCARD	OTHERS
Ireland		89	11	
United Kingdom		83	15	1
Spain		67	33	
Finland		55	44	1
Poland		54	46	
Turkey		54	44	2
Russia	8	46	38	6
Sweden		32	66	3
Italy	46	24	28	1
Germany	72	14	12	2
Denmark	68	14	18	
Norway	73	12	13	3
Belgium	81	11	4	4
Netherlands		5	95	
France	85	2		14

Source: <https://www.statista.com/statistics/1116580/payment-card-scheme-market-share-in-europe-by-country/>

Based on the presented information, Visa and Mastercard remains one of the most important players on the market. According to Investopedia¹⁵, in 2019, Visa generated \$23 billion in total revenue with payments volume of \$8.8 trillion. In the same year, MasterCard generated total revenue of \$16.9 billion, with a payment volume of \$6.5 trillion.

The European Commission has conducted antitrust investigations in the payment card market, targeting Multilateral Interchange Fees (MIFs)¹⁶. These are fees charged by a cardholder's bank (the 'issuing bank') to a merchant's bank (the 'acquiring bank') for each sales transaction made at a merchant outlet with a payment card. In payment schemes such as Visa and MasterCard, which are associations of banks, these fees are multilaterally agreed by member banks. When a customer uses a payment card to buy from a merchant, the acquiring bank pays the merchant the sales price less a 'merchant service charge', the fee a merchant must pay to his bank for accepting the card as a means of payment. A large part of the merchant service charge is determined by the interchange fee. Merchants pass on their costs for accepting card payments to their customers by raising retail prices.

According to the same source, the MIF appears to be a decision of an association of undertakings that may have the object and the effect of restricting competition between acquiring banks. The MIF is an important part of the total cost for card acceptance and ultimately contributes to the prices of goods and services for final consumers. As demonstrated by the existence of payment schemes that function without a MIF, multilateral interchange fees are not indispensable for the viability of payment cards. Even though MIFs appear – at least in the cases investigated by the Commission so far – to constitute

¹⁴ https://ec.europa.eu/competition/sectors/financial_services/main_highlights_en.pdf

¹⁵ <https://www.investopedia.com/articles/personal-finance/020215/visa-vs-mastercard-there-difference.asp>

¹⁶ https://ec.europa.eu/competition/sectors/financial_services/enforcement_en.html

a restriction of competition within the meaning of Article 101(1) of the Treaty on the Functioning of the European Union¹⁷ (TFEU), they may be eligible for an exemption under Article 101(3) of the Treaty if it can be shown that they have positive overall effects on innovation and efficiency and allow a fair share of these benefits to be passed on to consumers. Some details on related investigations are presented in Annexes.

As for now, the situation in several countries from European Economic Area is presented below.

Table 5. Multi-lateral Interchange Fees in European Economic Area (Visa Consumer)

	CREDIT & DEFERRED DEBIT	IMMEDIATE DEBIT & PREPAID
All Extra-EEA Issued Visa Consumer		
Card Present ¹⁸	0.3%	0.2%
Card-Not-Present ¹⁹	1.5%	1.15%
Intra Europe EEA	0.3%	0.2%
Austria	0.3%	0.2%
Lithuania	0.3%	0.2%
Romania (general rate)	0.3%	0.2%
Specific rates: Business - Government Payments and Tax	BGN 0.40 ²⁰	
Business - Utility and Bill Payments	0.80%	
Corporate & Purchasing - Government Payments and Tax	BGN 0.40	n/a
Corporate & Purchasing - Utility and Bill Payments	0.80%	n/a
Bulgaria (general rate)	0.3%	0.2%
Specific rates: Business - Petrol	1.20%	
Business - Government Payments and Tax	0.30%	
Business - Utility and Bill Payments	RON 0.65 ²¹	
Corporate & Purchasing - Petrol	1.20%	
Corporate & Purchasing - Government Payments and Tax	0.30%	n/a
Corporate & Purchasing - Utility and Bill Payments	RON 0.65	n/a

Source: Made by authors based on <https://www.visa.co.uk/about-visa/visa-in-europe/fees-and-interchange.html#2>

It should be mentioned that there are some specific situations where **Visa and Mastercard could provide special costs** that influence interchange fee (like it could be seen it is done by Visa in Romania and Bulgaria). In the desk discussions with Visa and Mastercard authors have been informed that it could be also applied for Moldova based on the official request from National Bank of Moldova or Ministry of Finance.

Based on the **ConsEcon-MSRP questionnaire on commissions applied in e-commerce and cashless economy (the Survey)**, interchange fee varies from 0.9 to 2.4%.

During the desk interviews, one of the most discussed subjects was the interchange fee, and it should or not be capped. In the authors' opinion, it should be capped just after other ways of influence on this part of the payment will not work (here authors refer to some direct negotiations with Visa and Mastercard), because of two main reasons:

- a) it will hurt the principle of fair competition because it will mean that the state interferes in a relationship between two legal entities.

¹⁷ <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A12008E101>

¹⁸ Card-present transactions are where (i) cardholder and card are present at either the merchant outlet or are with the merchant's physical POS device at the time of payment transaction, and (ii) the cardholder's issuer-provisioned payment credentials are present and electronically read by the merchant's physical POS device

¹⁹ Card-not-present transactions are all transactions other than card-present transactions

²⁰ As for 1 October 2017. Equivalent of EUR 0,21

²¹ As for 1 October 2017. Equivalent of EUR 0,13

- b) in the country where it was implemented recently, it does not decrease prices or raise electronic payment infrastructure but just put the same amount from one shoulder to another (banks increase other related commissions, and the net effect was not the expected one).

Speaking about the alternatives, **domestic solution** could be analyzed, and it was one of the most popular through desk interviews was to create something that could diminish the costs and, subsequently, boost the development of a cashless economy and e-commerce on the local market – j a kind of “**Domestic**” **special regime**.

It could be done in two ways: either to (1) cap interchange rate for processing by our local processing centers of local cards enquires from local POS Terminals, or (2) implementing a SWITCH mechanism that will provide, basically, to the same result.

Nevertheless, before introducing the cap on internal interchange fee or developing the SWITCH mechanism should be taken into consideration if such a system will be financially sustainable:

- Would it generate enough revenue for all players (Processing center banks, PSP) for covering the cost?
- Would it create enough profit for investment and development?
- Would it increase the number of the non-cash transactions?

According to the statistical data presented by NBM, 0.1% of the non-cash payments in Moldova with cards issued in Moldova will represent only 10 mln MDL per year revenue (NOT PROFIT). Therefore, a more detailed analysis should be performed on the cap for the internal interchange fee; otherwise, the Moldova state budget or the NBM would be responsible for supporting this activity but not banks and PSPs because such action could generate losses.

It was also discussed with governmental and private stakeholders the possibility to develop an MPay system²² to make it a kind of SWITCH system for all banks and PSPs. The market currently needs 2 solution that could be build based on the MPay:

- technical switch that will merge all banks and PSPs for the internal transactions in Moldova without use of the international payment solutions like VISA or MASTERCARD.
- common database of all utilities bills and all other municipal service providers for the population (cleaning companies, kindergartens etc.)

Technical switch could be used as temporary solution before SAPI's instant payment will be introduced by the NBM, which, in the authors' opinion remains the best solution for Domestic Payments.

Under the common database Mpay could resolve two main issues:

- To reduce number of the contracts between utilities companies and banks and PSPs: utilities companies sign agreement with Mpay and provides all bill information to MPay, but banks and PSPs based on the agreement with Mpay collets that data from Mpay. No direct relations between utilities and banks, therefor population is not limited in the payment solutions.
- To provide billing systems solution to the municipal companies and kindergartens

Some unique solutions are also produced in the same context.

²² MPay is a governmental service through which public services could be paid with any payment instrument of the client's choice, such as bank card, internet banking, or cash.

Any of the previously presented measures should be realized together with increasing the tariffs for ATM withdrawal,

The interesting situation is created on the e-commerce market in Moldova. The processing of the payment card by POS Terminal should be done together with issuing a "Bon fiscal" from the cash register machine. Merchants indicate that this causes some inconvenience and misunderstanding because, on the one hand, a cash register machine (CRM) should be used to quantify cash payments, which could not be tracked differently. On the opposite, electronic prices are traceable, and there should not be any need for CRM. Thus, in the author's opinion, some relevant amendments should be made to adjust the existing legal framework to this situation, in which there will not be any need in issuing a "Bon fiscal" if the transaction is made electronically. The only exception should be in the care of direct requests by the customer.

There should be also taken into consideration the proposed subsidy scheme instead of VAT rate diminish described above as essential support and incentive. Because it is imperative to ensure the right support from the State to widespread POS Terminals countrywide, those two measures could be appropriately combined by emphasizing strategic regions or activities.

According to the earlier mentioned survey results, fixed costs associated with maintaining a POS Terminal by a merchant vary from zero to 500 MDL monthly.

Speaking about **web pages and the direct payment acceptance system** applied here, there are some fixed costs. Usually, it consists of three elements:

- Authorization fee per transaction (about 2 MDL)
- Connection fee (about 200 MDL)
- Monthly fee (200-250 MDL)

According to the survey responses mentioned earlier, the processing time of the request for connection of the merchant to the direct payment acceptance system integrated on its web page could lead from 3 days up to 2 years, depending on how well prepared the merchant with his webpage is.

Asking about the causes of rejection to process the merchant's request to the system of direct acceptances of payments integrated on its website, banks mentioned a weak preparation of the merchant to be connected, first, followed by reputational risks, high brand risks, and so on.

c) bank zone

One of the fundamental problems mentioned by merchants and PSPs during the desk interviews is **the value of the deposit requested by banks** in electronic commerce for web pages and the direct payment acceptance system. Those deposits are established to protect customers from the possible incapacity of an e-commerce participant in "paying his bills".

According to the survey respondents, the value of the deposit consists of two parts: fixed value (from 0 to 300 000 EUR) and a percentage from the turnover (5-10%) and the period for which the bank retains the deposit is about 180 days (6 months).

During the interviews, it was found that Victoriabank has introduced a 0% rollover deposit for Local Producers. Usually, the Rollover deposits start from 5 up to 20% for the period from 2 to up six months.

As the opposite, Paynet (PPS) does not apply rollover deposits for its merchants (but the merchant fee is higher than that banks' have).

Based on the information presented by the banks during the desk interviews, the value of the deposit depends a lot on the credibility of the client, if the client has his accounts in the same bank if the client also has a physical point of sale, if there are any recordings about his capacity of pay, the number of transactions, currency in which transactions are performed usually and so on.

Another reason mentioned by the banks is that international payment systems request to have this kind of deposit. Based on Visa and Mastercard representatives' discussions, there are very few cases when there is a direct request from the system on the promise. It is associated with the high risks' transactions like gambling, betting, or sell of air tickets, for example.

Concerning why this deposit exists, the authors still consider that the average amount of bank deposit that is applied is a little bit too high and the period is a little too long. To develop e-commerce, it is mandatory to reconsider the risks that stand behind the decision to apply it. From the authors' point of view, it should not exceed 3% ad value and not exceeding 2 months (delivery period + 30 days (minimum according to law 105/2003) + delivery return).

d) international payment system zone

It is referred to Visa and Mastercard as the biggest international payment card providers. Of course, they play a massive role in establishing the interchange fee due to some tariffs applied by them in the processing activity.

But still, as author's succeed in finding out, there is a possibility to negotiate with Visa and Mastercard to agree on diminishing the interchange fee for some strategic payments: to the state or local budget, to Customs Office, social products, drugs, medical services etc. The negotiation should be provided by NBM or MoF, who should come with the request, respectively. It is this kind of experience in Ukraine and Russia.

Payment Service Providers

The European Union pays particular attention to the development of FinTech. In this regard, the European Commission adopted in March 2018 the FinTech Action Plan²³, designed to promote competitiveness and innovation in the European financial sector. The action plan mentions key goals that create opportunities for developing innovative business models across the EU, supporting the integration of new technologies such as blockchain / DLT, artificial intelligence (AI) and cloud services into the financial sector, the cyber security enhancing and the integrity financial system.

Speaking about e-commerce and payment services, there should not be diminished the importance of Fintech companies and their massive contribution in developing the alternative financial services

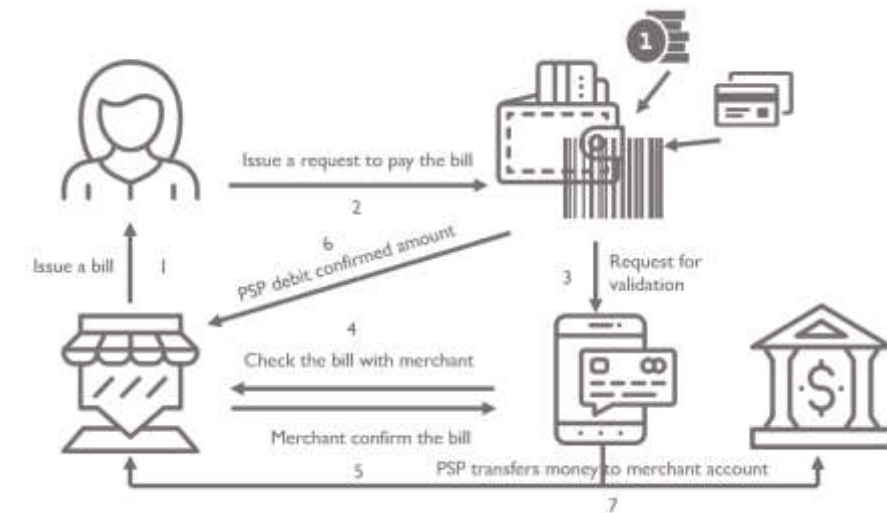
THE REASONS FOR BANK DEPOSIT

- the credibility of the client,
- if the client has his accounts in the same bank,
- if the client also has a physical point of sale,
- if there are any recordings about his capacity of pay,
- the number of transactions,
- currency in which transactions are performed usually
- other reasons for secure transactions

²³ https://ec.europa.eu/info/publications/180308-action-plan-fintech_en

market and alternative to traditional bank cards way of payments (digital wallets, QR codes, and so on).

Figure 8. E-commerce through digital wallet or a QR code administered by PSP



Source: Made by the authors

Based on the ConsEcon’s Electronic Payment Survey, one out of five of the most important measures to develop e-commerce in Moldova is stimulating alternative methods of electronic payments. More than that, in PwC Report on Shadow Economy for the MoF, the same solutions were stipulated to promote a cashless economy.

The use of PSP solutions in e-commerce is a growing area. But still, many problems made this area of activity very risky (very few regulations are provided) and very uncertain.

If it lists the main issues focusing on PSPs, the low interaction between banks and PSPs are observed. PSPs are considered to be high risks activities and are treated respectfully by the banks. That leads to a decrease in operability of PSPs and fewer implicit transactions.

The critical step was taken by offering access to SAPI registration for SPSs starting with 2020.

Table 6. Licensed Electronic Money Institutions and SAPI registered (by December 2020)

NAME OF THE ELECTRONIC MONEY INSTITUTION	NUMBER AND DATE OF THE DECISION ON LICENSE ISSUANCE	REGISTRATION STATUS IN SAPI
„Paymaster” SRL	no. 175 of September 4, 2014	No
„Paynet Services” SRL	no. 227 of October 31, 2014	Registered
“BPAY” S.R.L.	no. 214 of August 8, 2016	Registered
„QIWI-M” SRL	no. 105 of May 23, 2018	No
„FINTECLY” SRL	no. 46 of February 13, 2019	No

Source: NBM webpage

The SAPI registration offers participants the possibility to open accounts to legal entities by creating IBAN identification. In this way, the interaction between the clients and SPSs becomes more comfortable and faster (one of the Open Bank principles).

But still, there are some issues with payment initiation services, which are services to initiate an order at the request of the payment service user concerning a payment account held at another payment service provider, because, based on the information received from PSPs, banks are somehow reticent to process quick those requests and even could refuse in that.

It is required to **implement as soon as possible PSD2 regulations in Moldova**. Based on the information from the NBM, the implementation process is ongoing, but it could take some time to the final implementation.

To support Fintech companies in their activity, some very particular steps should be taken.

First of all, **supporting funds could be allocated on the state level or in partnership with international donors or interested companies**. Some particular projects are supported by the international community of donors or specific legal entities, but a more systemic approach is required. A good platform for that could be Tekwill project Startup Moldova[1] with their Digital Upgrade line. A particular supporting line could be found in Visa and Mastercard sphere. Both companies support innovations in the service providers industry all around the world. There is a need for a financed line and a call of proposals for the best projects in this area.

Second, some **stimulating mechanisms should be implemented for FinTechs**. For example, in Romania, ASF²⁴ launched FinTech Hub²⁵, within which one created the institutional framework for dialogue with companies developing FinTech, supporting thus the development of modern technologies on the financial market, while maintaining the confidence and level of protection appropriate to the clients. Therefore, FinTech Hub lays the foundation for developing an effective communication and collaboration method, through which both the authority and the regulated entities and / or other companies interested in better understanding the opportunities and risks generated by FinTech so that the optimal solutions are transposed into practice more easily, after testing and validation by stakeholders. The National Bank of Romania also launched FinTech Innovation Hub²⁶. In fact, through FinTech Innovation Hub, a point of contact was established where the National Bank of Romania can be asked questions about the innovative solutions in the area of payment and financial services or be requested non-binding guidelines with regard to the compliance of innovative products and services with legal requirements in force.

In the authors' opinion, a similar hub should be established in Moldova, but in our case it should be a joint effort of BNM, NCFM, MoF and ATIC, in order to assist FinTechs in their activity by offering requested non-binding guidelines with regard to the compliance of innovative products and services with legal requirements in force.

The next step would be implementation of a "Sandbox" mechanism for FinTechs. A sandbox is a testing environment that isolates untested code changes and outright experimentation from the production environment or repository, in the context of software development including Web development and revision control. It is important to create a virtual space where this kind of companies could test their products and their activity by having some special treatment by regulatory main bodies during this.

At a first stage, the concept should be elaborated on how it should look like in Moldova.

As for Visa and Mastercard, one of the problems emphasized by the SPSs is that there are some difficulties in working directly with international service **providers**. Based on the information author's got from global service providers during the desk interviews, Fintech should make settlements. Otherwise, it must work with banks accredited to do so nationally or, possibly, a collateral - core deposit in a bank abroad. In this case, PSPs could receive an Associate's status, and the sponsoring bank assumes certain risks and responsibilities, either it is a local bank or another international bank. More information should be provided here to know about all these opportunities.

²⁴ Romanian equivalent of NCFM

²⁵ <https://asfromania.ro/en/fintech-hub/about-fintech-hub>

²⁶ <https://www.bnr.ro/Why-have-we-launched-FinTech-Innovation-Hub-20333.aspx>

Another line of difficulties flagged by PSPs is connected with tax administration issues. It refers to how tax administration understands (or not) how PSPs activities take place. As a result, there is either lack of regulations or upregulation in some activities. Some clarification should be provided here from the STS (MoF if needed) to give more clarity about how this kind of services should be taxed and reported.

Distance identification

Some systems require distance identification of the persons, and this tendency will be more and more critical in e-commerce due to globalization, internationalization of businesses, and COVID-19. During the desk interviews with SPS, banks, NBM, NCPDP, and OPCML, there are some problems in applying e-KYC rules. It should be mentioned that the implementation of KYC rules is also a proposal of the ATIC community against COVID-19²⁷.

Through e-KYC identification, the clients' identity is verified remotely by the companies in compliance with legal requirements and current laws and regulations. There are some processes of identification and verification of the identity of the client on distance. It is done to be sure e-commerce is not done with money laundering, terrorism, or corruption, among others.

On the European level²⁸, AML5 (or 5AMLD) together with eIDAS define the regulatory framework in the financial and banking sectors in Europe and introduce, for the first time in history, fully secure digital identification methods so that customers can interact with their bank, insurance agencies, administration, etc. entirely remotely. This means that companies can acquire customers in any country in Europe, within an open and homogeneous market of 508 million people, with just one click, thanks to Videoid.

In Moldova, KYC regulations are (somehow) reflected in Law on preventing and combating money laundering and terrorist financing no.308/2017 and in Regulation on the requirements for preventing and combating money laundering and terrorist financing in the activity of banks, approved by the Decision of the Executive Committee of the National Bank of Moldova no.200 of August 9, 2018.

Both of those regulations are quite restrictive and do not allow to implement of a real e-KYC system. As authors succeed in identifying, some amendments are now in preparation that will bring the legislation to AML5 rules.

During desk interviews, some stakeholders shared some experience in e-KYC that was implemented by them or which they consider that could work, and it is done in other countries. One example is how, in Germany, a person comes to the post office and logs in. It connects via Skype with the bank, and the post office employee authenticates the customer. Another example of third-party involvement is to work with a specialized international company that can provide remote identification services based on biometrics, as Orange Romania is doing for Revolut. It could be also an option to use notarial office like a place for identification.

In the authors' opinion, based on international practice, several actions could be taken on the regulatory level. It could be either to establish a process of validation of KYC Guidance elaborated by bank or PSP, or elaboration of some rules (Guidance) by NBM and other relevant authorities. Those regulations should contain some relax the rules on KYC (certain types of financial products, specific categories of customers - based on a professional study²⁹); the allowance, within the limits of some amounts (e.g., up to 20,000 MDL) to create a regulatory opportunity for video conference authentication recording (Skype or Viber), after fixing the data from the ID; create a regulatory framework for being able to connect third parties in the e-KYC process.

²⁷ <https://ict.md/wp-content/uploads/2020/07/ATIC-Proposals-on-digitalization-Post-COVID-19-I.pdf>

²⁸ <https://www.electronicid.eu/en/blog/post/kyc-know-your-customer-means/en>

²⁹ We know about the World Bank expertise in this area in our region.

4. LOGISTICS

Talking about logistics with the main stakeholders it was confirmed that should be taken into consideration to main issues: clients' location and nature of the goods.

For the food industry (RECA and food retail) on the market are presented several delivery providers: EVO FOODS SRL <https://ifood.md/>; CM-Fruct S.R.L. <https://www.straus.md/ru/>; GLOVOAPPMOL SRL <https://glovoapp.com/ro/>.

Development of the own delivery channel is also used by local food retailers, restaurants, and fast-food providers are METRO CASH & CARRY MOLDOVA S.R.L. via agent ZAKAZ EXPRESS S.R.L. <https://metro.zakaz.md/ro/> only for Chisinau and suburbs; Trabo - plus SRL <https://www.andys.md/ro/>; Pegas SRL <https://pegas.md/ro/>; Pegas Burger S.R.L. <https://pegasburger.md/>; Fidesco SRL <https://fidesco.md/shop/>.

All food delivery is currently limited to the retailer's location, restaurant and not covered all Moldova.

Using the food sector's delivery providers reduces the merchants' cost in investment for their own delivery department. The merchant should also be ready that the process should be implemented, and additional charges for the marketing of the own products should be prepared.

As an example, iFood solution – fully Moldavian IT solution developed by Fusion Works in collaboration with iTicket– represents an IT solution that has the following parts:

- Customer app (including mobile and desktop version)
- Administrator app
- Restaurant app
- Courier app

Glovo is an international player who has entered Moldova in October 2020 and is also a fast-growing player on the market.

Straus.md was the first player on the market for Chisinau, but now it became one out of three players on the market.

The main issue on the logistics in this sector is that delivery should be fast and more than 50% is paid as cash-on-delivery and based on the current regulation, the courier should be ready to have at least two devices: a cash register machine and P.O.S. terminal that creates additional expenses for procurement of such devices for the logistics company for each courier. As a result of reducing such costs, delivery companies presenting on the market are issuing the tax receipt at the moment of the order pick up by the restaurant's courier. As a result, additional risks for time differences exists on this part of the delivery when is used cash-on-delivery method.

More possibilities exist for nonfood products for last mile logistics:

- own delivery channel
- post providers

Own delivery channels are usually used by big retailers with shops in other cities as Chisinau or Balti. Nevertheless, they also use post services of the licensed post service providers for all territory of Moldova.

According to the National Regulatory Agency for Electronic Communications and Information Technology (ANRCETI), 45 companies have the license for post services for Moldova, and 30 have the right to accept payment from the beneficiary on delivering the good (Reimbursement). Source (https://anrceti.md/furnizori_comunicatii_postale)

Some of the retailers like BM TECHNOTRADE SRL (<https://www.bomba.md/>) has own license for the post-delivery.

Use the post service for the delivery to the final consumer (individuals) provides the possibility to reduce the delivery cost as this kind of assistance is exempted from VAT.

At the same time, nobody was ready for the pandemic in March 2020. Very few companies have been prepared for the boom of online sales and, thus, for delivering the goods during pandemic. According to collected information starting in March 2020, online procurement has doubled compared to February 2020 and has doubled to the beginning of December 2020 compared to March 2020. And this is only for Chisinau and suburbs.

Only a few deposit service providers have had API (Application Programming Interface) at the beginning of the year 2020. Unfortunately, the universal post provider Posta Moldova does not have API at the moment that could be integrated by merchants.

Posta Moldovei is the universal postal provider in Moldova and is a full member of the Universal Postal Union (UPU), a member of other related international organizations such as the Regional Communications Community, PostEurop (European Association of Postal Operators).

Nevertheless, Posta Moldova was not ready for the boom in e-commerce:

- No API
- Low level of the digitized and automated processes
- No mobile app for the post box terminal
- Delivery time is too long
- Decision making and launching of the new products take too much time

Posta Moldovei, with USAID, GiZ support, has started a complex process of revising its activity and internal rotation. Also, they are in the process of launching new products like:

- Electronic money (are in the process of obtaining the license from the NBM)
- Ecommerce iBox – standardized and labeled packaging for delivery on the territory of Moldova
- Development of the API solution for e-commerce
- Further development of the post terminals (to increase the number of the terminal from 30 to 50)
Automatization of the processes related to customs clearance connection to the Custom Data Systems (Custom Declaration Form CN23 for the post-delivery)

The status of the **Authorized Economic Operator (A.E.O.)** could be an interesting option in order to reduce the time for customs clearance. According to Customs Service webpage³⁰, there are some clear benefits of A.E.O. including: (a) Provision of minimum information at customs clearance of goods; (b) Clearance of goods at company's premises or other loading or unloading places, accepted by the Customs; (c) Declaration of goods without the need to go to the Customs, but electronically,

³⁰ <http://customs.gov.md:888/en/content/benefits>

using the digital signature; (d) Use of own seals, if these meet the requirements set by the Customs and there is a proper record keeping thereof, in accordance with the Customs rules; (e) Use of preferential selectivity criteria in the risk analysis system from “ASYCUDA World”, against which the percentage of customs declarations randomly routed to customs lanes is defined; (f) Assistance (information, advice) provided by appointed customs officers that is required to undergo the simplified clearance procedure and so on.

It is important, at least for postal operators, to get to become an A.E.O. in order to be able to benefit from those indicated above.

At the same time, Nova Posta (NEW POST INTERNATIONAL MLD SRL) is increasing its presence on the local market and is also oriented to automatizing its process with collaboration with the sellers and the customers.

Post services have not digitized their process, and a lot of the duplications of the document with different needs it is created. At the same, tariffs are not high, and all SMEs should think very carefully regarding the development of the own courier services. Nevertheless, the presence and the process of the post-service providers outside of the cities is deficient.

Table 7. Last-mile delivery fees comparison

TARIFF / PROVIDER	POSTA MOLDOVEI	NOVA POSHTA	MUVI EXPRESS
1-2 KG CHISINAU	35 MDL	40 MDL	35 MDL
1-2 KG REMOTE REGION/CITY	53 MDL	60 MDL	70 MDL

Source: A rapid review of the e-commerce landscape in Moldova Report

There was no provider of the fulfillment and smart logistic in Moldova. Just in November 2020 also the Romanian fulfillment company FRISBO FULFILLMENT SA has opened a local subsidiary. SMEs are an excellent possibility to reduce their time for delivery and considerably reduce their operational costs by using the smart logistic operator's professional services. Unfortunately, SMEs are mostly oriented on reducing direct costs, and very rare compare them to indirect costs like employment and training of the new employees, cost of the mistakes made by them due to the absence of knowledge in the logistic domain.

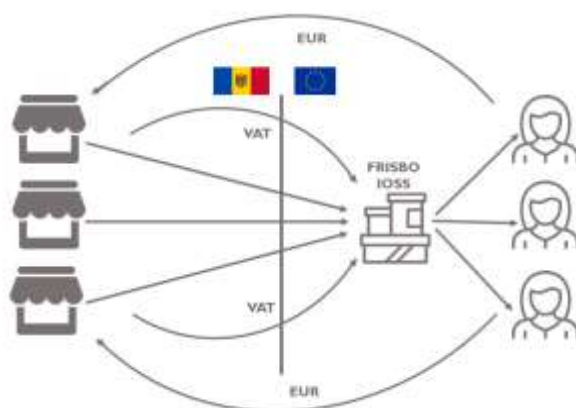
Discussing this part with the leading players in the logistic, authors have noted that many of them precisely mentioned this part – the SME does not take into consideration the indirect cost of its decisions and also lack of time for studying the alternative solution very often creates additional operational costs for its business.

Export activity

For export activity, merchants should take into consideration the following:

- Limited offer of the post logistics: Posta Moldovei, and courier services with fast delivery DHL, UPS, TNT. Nova Posta could be used as a posting provider for the Ukraine market
- Custom clearance on export
- Custom clearance in the destination country: nontaxable limits varies for each country

Figure 9. How to use the fulfillment in destination country



Source: Made by the authors

Unfortunately, due to the low quantity of export with post-service providers, especially with international courier services, tariffs are very high. Therefore, SMEs should look for the possibility of making pools of the companies for export that could jointly provide minimum monthly quantity for the export parcels and, as a result, negotiate special delivery tariffs for different regions.

Another possibility that exists here – is to use the fulfillment services in the destination country but raise additional costs for creating and maintaining a legal person of the country of the destination. Such costs also could be reduced in case if the company will provide such services for the pool of the exporters.

Export custom clearance currently should not represent a high cost for the SMEs based on the temporary solution provided by the Customs – periodical declaration that could be presented for up to 30 days³¹. Additionally, to this possibility merchant could be declarants on the own name. It means that should be appointed an employee responsible for preparing electronic customs declaration. Therefore, the cost could be reduced if the same employee will represent such services for few merchants; as the result it will reduce the cost for each SME from the pool. Nevertheless, companies should be aware that they are fully responsible for the declarant's mistakes; therefore, a special training performed by the Customs (with corresponded certification) could reduce such a risk and could additionally increase trust in such solution compared to the full outsourced Broker services.

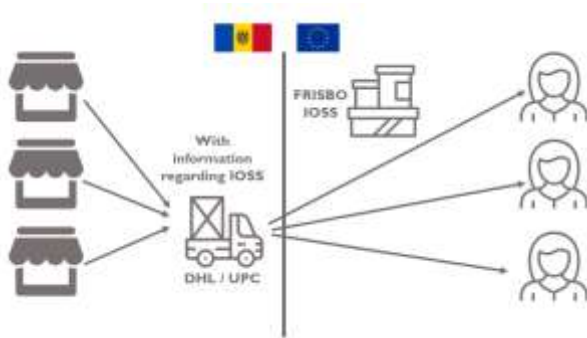
But the main issue with the export is the cost of customs clearance in the destination country. Unfortunately, the nearest market - EU starting 1st July 2021 will reduce the nontaxable limit for post parcels to 0 EUR. As a result, SMEs will be obliged to use Delivered Duty Paid Incoterms regime (DDP). Otherwise, the customer will have an additional cost and will lose extra time for collecting the parcel from the Post office or Custom office.

At the same time EU has provided for non-EU businesses following facility - Import One Stop Shop (IOSS). Moldovan SMEs should register the IOSS representative only in one Member State within the EU - the Member State of Identification (MSI). Therefore Merchants must have an IOSS representative in the EU / EEA, acting as merchant's fiscal representative in EU. When selling through their website, merchants themselves need to appoint an EU intermediary to obtain an EU IOSS VAT number. However, when dealing with a marketplace/platform, this marketplace/platform's operator becomes liable to pay the VAT to the EU tax authorities.

³¹ Order of Customs Services 408/2019 for approval of the instruction on the periodic declaration procedure of goods exported by economic operators through consignments international postal services

As the result, a common IOSS representative for the pool of SMEs (like a “marketplace” but from the tax point of view) could reduce considerably costs and save time.

Figure 10. Implication of the IOSS



Source: Made by the authors

5. REPORTING AND OTHER COMPLIANCE MEASURES

E-commerce as any business needs not only the vision, strategy, product and people but also correct decisions and attitude in following 3 main fields:

- Accounting & Reporting
- Taxation
- Legal aspects

All transactions should be collected and presented in such a form that will allow to merchants:

- to know the results of the Company's activity – profit or loss, information regarding what kind is goods has the highest rate of rentability, which product has the greatest influence on turnover,
- to plan an activity for the next quarter, next year
- to compare the results with the previous year, with the competitor
- to estimate the value of its business

All decisions regarding the start of the new activity, launching a new product, and entering the new market should be taken only after analyzing the taxation of these decisions. Tax mistakes cost too high, and not only from the point of view of fines and penalties. Still, it could generate additional losses and, through incorrect pricing at the beginning, a wrong decision regarding VAT registration, as an example.

Legal aspects are essential; all agreements should be signed on time. It is better to spend one more week before the launch analyzing all traditional elements and drafting the agreement than spending months or years in the courts with clients, partners, suppliers, or employees. Time is money.

For SMEs, e-commerce is an excellent possibility to start a business with the less initial investment. There is no rent for commercial spaces. There is no need for costly reparations of the shops; there is no need for a salesperson, no training for them. At the same time, due to the main features of e-commerce: transparency, speed, real-time feedback, the merchant should invest more time and financial resources in these three fields, accounting, taxation, and legal. And it should be done from the 1st day of the launching of its e-commerce or marketplace.

Accounting and reporting

The main rule for accounting is that any transaction must be done based on a primary document or the transaction generate such primary document – tax receipt, confirmation that the card has been accepted and the amount was written off. Yes, the primary document could be in electronic format, and e-commerce is the best case for having all primary documents in electronic form, as it saves time, paper, reduces the number of people involved, and as a result, saves money.

The primary document should confirm all changes in the owner of the good. As a result, a tax receipt should be issued, VAT invoice should be provided, AWB should be printed and signed, customs declaration should be signed.

Therefore, each step of e-commerce should be reviewed through an accounting perspective and build so that the platform will generate and save all documents and what customer or courier should do is to print and sign the receipt, the report.

The merchant without any delay should connect his e-commerce platform or marketplace with his accounting systems.

Full implementation of electronic documents like e-invoice between suppliers or service providers will have the following results: cost savings on courier services, time savings on delivery, and control.

Another important topic that should be taken into consideration is the procedure of the goods return by the customer. The Merchant should calculate the costs of such delivery back and should organize the process with clear description on his website for the final customer. Additional arrangements should be done with delivery companies and primary documents should be agreed between Merchant and delivery company that will be responsible for the taken back the returned goods.

Usage of the electronic signature in the e-commerce era is also essential, and its cost is less than 10 MDL per month in case of the mobile signature or 350 MDL per year. Still, it means that the contract between companies could be signed remotely, without the physical presence. Also electronic signatures became more useful instrument in the era of the work from home, at least for the relations between employee – employer.³²

This electronic environment also means that the merchant doesn't need a physical office for his accountant, and the business could be fully outsourced, like fulfillment services.

Different accounting and reporting rules also apply to various legal forms of business activity.

But correct legal forms usually should be reviewed from the taxation perspective, not only accounting.

Taxation

Good tax adviser with accounting knowledge at the start could save money and time for the merchant as before starting it should be taken into consideration the following aspects:

- Who are the customers: individuals or legal entities?
- Location of the clients?
- Nature of the products: food, non-food, services?
- Annual planned turnover?
- Licensing and additional authorizations
- Local taxation
- Employees or outsourcing
- Are the goods or services exempt from VAT, or not?
- Cash-on-delivery or online payment

There are different opinions regarding activity of the e-commerce under IT park umbrella. In the author's opinion before starting e-commerce in IT park should be taken into consideration following:

- Limitation with 30% of the other than principal activities in the IT park (art. 8 of the Law 77/2016) and not all e-commerce fall under the Law
- Pure economically IT park regime is better for the companies that in cost structure have salary components not less than 50% or the markup is not less than 71% of the cost.

Based on the answers more balanced decision regarding how to start an activity could be taken.

³² <https://ict.md/wp-content/uploads/2020/07/Ghid-Semna%CC%86tura-Electronica%CC%86-Final.pdf>

Table 8. Legal forms and taxation (based on data for 2021)

DESCRIPRION/ LEGAL FORM	LIMITED LIABILITY COMPANY (SRL) OR JOINT STOCK COMPANY (SA)	INDIVIDUAL ENTERPENEUR	LIMITED LIABILITY COMPANY NON-VAT PAYOR AS SME (SALES UP TO 1.200.000 MDL PER YEAR)	PATENT HOLDER	INDEPENDENT COMMERCE ACTIVITY
Limitation of the revenue	Non limited	Non limited	Not exceeding 1,200,000 during 12 consecutive months. By exceeding this amount, the SRL changes the status, and general taxation is applied	300,000 MDL during 12 consecutive months.	600,000 MDL during calendar year.
Income tax rate	12% on profit	12% on profit	4% on total revenues except FX revenues, dividends	Flat rate that is not exceeding 300 MDL per month (flat fee dependent of the activity performed)	1% from revenues from independent activity
Dividend tax	6% from the amount of the distributed profit	Not applicable	6% from the amount of the distributed profit	Not applicable	Not applicable
State Social insurance	Only in case of the employees: 24% on salary of employee	Flat fee 11,331 MDL per year for the individual merchant Standard rate for employees - 24% on employee salary	Only in case of the employees: 24% on salary of employee	Flat fee 944.25 MDL per month of the patent validity (11,331 MDL/12)	Flat fee 944.25 MDL per month of the patent validity (11,331 MDL/12)
Obligatory medical insurance (OMI)	Not applicable. OMI in the amount of 9% is withheld from salary	Flat fee 4,056 MDL per year, with possible discount in the amount of 50%	Not applicable. OMI in the amount of 9% is withheld from salary	Flat fee 4,056 MDL per year, with possible discount in the amount of 50%	Flat fee 4,056 MDL per year, with possible discount in the amount of 60%
Employment	Unlimited	Unlimited*	Unlimited	Prohibited	Prohibited
License activity	Applicable only if the license obtained	Applicable only if the license obtained	Applicable only if the license obtained	Prohibited. Activity is limited only with the patent activity	Prohibited.
Local tax	Applicable based on the activity	Applicable based on the activity	Applicable based on the activity	Non applicable	Non applicable
VAT Threshold 1,200,000 MDL per consecutive months	Applicable	Applicable	Non applicable	Non applicable	Non applicable
Cash register machine for cash payments	Applicable	Applicable	Applicable	Non-Applicable	Obligatory

Export activity	Applicable	Applicable	Applicable	Prohibited	Prohibited
Tax reporting	Monthly, quarterly, annual	Monthly, quarterly, annual* *Annual for the IE that has not more than 3 employees pe year and are not VAT payer	Monthly, quarterly, annual	Not applicable	Annual
Accounting rules	General accounting reporting with applicable NAS or IFRS rules on the company's Decision	General accounting reporting	General accounting reporting	Not applicable	Simple entry

Source: Made by the authors

According to the table, the patent holder could be a good possibility for the starting e-commerce for the self-employed person. The development of the logistics service provider and marketplaces allows SMEs to outsource some of the activities. As a result, it reduces cost and the number of reports that should be provided. Like IE, a non-VAT payor has no more than three employees during the year; it is responsible only for annual reporting.

The main difference between e-commerce – at the same time, you may sell goods or provide services for customers that are situated in different cities, countries, or parts of the world. But different areas mean not only different currencies but also different rules on VAT, VAT of other countries (you may be in the situation that you should add to your price VATs of the other state and this collected VAT should be paid to that state on a monthly or quarterly basis), different license rules, additional requirements for the information placed on your website.

The Merchant could be in the situation that he will be obliged to close access to his e-commerce platform for citizens of other countries due to the restriction rules for his goods or services or due to the license rules that are applied in other countries. It is better to lose some revenue but not get a penalty from the payment provider, mainly if Visa or Mastercard are accepted on the e-commerce platform. These international payment service providers permanently control their merchants and their legal compliance including compliance to the legislation of the customers' origin country. The merchant should be ready to obtain different VAT numbers or fiscal codes for the same company in different countries.

Electronic signature and electronic documentation are the "gold standard" for e-commerce, but not in Moldova now. The merchant should be ready to stipulate rules for using electronic documents for the suppliers. E-invoice is a suitable instrument for the internal market; electronic custom declarations are the perfect international trade instrument. One of the problems connected with it is the short time of availability of the signature and mandatory update of it at issuing office. It would work better if there will be a possibility to update it automatically in MCabinet.

E-commerce via digitization and automatization reduces transaction costs for the merchant considerably and, as a result, reduces the prices for the final consumer.

Therefore, cash in e-commerce has a higher cost comparing to the offline business. As mentioned before, cash-on-delivery means a higher risk of fraud and delays in having the amount on time. It also

increases the cost of the logistic (higher fee is applied by postal service providers, additional delays of the collecting money from the postal service provider)

Simultaneously, according to local rules, some requirements sometimes ultimately reduce this effect: the obligation of the using cash register machine for the transactions paid by card online or via POS Terminal. So, it means that merchant on delivery should provide tax receipt issued by the cash register machine and it means that the number of the devices is doubled (cash register machine + POS terminal) and also if the customer pays online with a card this also doesn't reduce merchant obligation to issue the tax receipt on delivery.

The same issue is in the case of using post services with cash-on-delivery. Such a situation has created additional problems with the complaint to the post-service providers based on the post services provider's tax receipt issue. Still, the customer forgets that he has signed Mandat Pentru Ramburs containing all details regarding the seller, and the post-service just provided services for delivery and collecting the cash amount. Therefore, the rules for applying the cash register machine in e-commerce activity should be revised. It could be a start point for the additional impulse of the non-cash payment in e-commerce.

Another issue raised by representations of the SMEs is the amount of the local tax for e-commerce as, for example, in Chisinau, it represents 5,000 MDL per year (and it was 10,000 lei per year in 2020). (there were some efforts provided by ATIC and SME Alliance to diminish it to MDL 5000) and additionally to the tax obligatory notification of commencement of trade according to lit c) p 6) of art. 13 of Law on the interior trade No 231/2010. In the local tax for the classical commerce, such tax is applied by the local authority where the shop is situated, compared to e-commerce that currently Tax Authority and local authorities would like to take them based on the legal address. This mix up with the definition that has been introduced by the Government Decree 931/2011 creates additional risks and does not take into consideration the following facts:

- E-commerce could be performed by the classical commerce firm, just in addition to their physical shops, and these shops are used as a point of pick up, and for such shops, the seller has paid local tax based on the commercial surface. So, it means that the seller pays twice the same tax for the same activity – point of sale
- Having a network of the shops or restaurants for different clients, the seller could use other shops situated in different towns or villages, how the tax should be paid, what is the base, and one more time the same issue – double taxation
- Marketplace – it is an intermediary platform, should be taxed be paid for the intermediary services in commerce and if yes what location should be used for the base – legal address or the physical location of the servers
- E-commerce that has no physical presence at all and use for e-commerce fulfillment services, including storage of the goods – what tariff should be calculated based on the storage situation or the legal address.

All these issues show that the current tax model is incorrect due the fact that as in some cases the company pays the same tax in the doubled amount. And it could create a situation than e-commerce companies will be using a small village without local tax on e-commerce or with very small value of it, and as a result, Moldova will have a first internal offshore zone for the e-commerce. The surprising thing is that the Classification of economic activities clear stipulates that if the retailer, in addition to its classical commerce scheme, develops e-commerce platforms – this activity has the same code as its main activity. According to Classificatory pure e-commerce with code 47.91 is only when the company has no offline commerce activity.

CHAPTER 7: SPECIAL CHAPTER ON CASHLESS ECONOMY AND FINANCIAL INCLUSION

Due to the COVID-19 pandemic, the critical question about the cashless economy and financial inclusion started to be raised more often.

Financial inclusion

According to Bloomberg³³, across the globe, Covid-19 is fueling the rise of the cashless economy as employees and consumers alike worry that the direct handling of paper currency could spread the coronavirus³⁴. But while the change means convenience and fewer virus worries for some, concerns abound for people who don't have sufficient bank, credit, or digital access. In the U.K., the consumer watchdog group Which? reported that 1 in 10 people was refused service at shops for trying to pay with physical money during the lockdown. Despite these concerns, shelter-at-home orders sparked an "online shopping revolution," as Bloomberg News reported, both in the U.S. and overseas as even the most reluctant of consumers shopped remotely for essential items. And while not all small and midsize businesses have gone cash-free, many are pushing card and contactless payments — as advised by the U.S. Centers of Disease Control and Prevention in their latest guidelines — or have switched entirely to online and mobile orders. The cashless economy may accelerate even faster in countries where pre-pandemic adoption was already high — like in Sweden, where some 80% of the population pay predominantly by card, and just 1.3% of the country's GDP is circulated in cash — and where mobile payments have been gaining traction, like in South Korea and Kenya.

On the other hand, the World Bank Group³⁵ pointed out by giving unbanked people access to financial services via mobile phones or the internet; technology is creating a brighter future for millions around the world.

That means that in the regions where traditional bank POS terminals infrastructure is not very developed, with a widespread internet worldwide, and with easy access and use solutions directly in cellphones, due to financial inclusion, a cashless economy could experience a new wave.

Financial inclusion means that individuals and businesses can access useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit, and insurance – delivered responsibly and sustainably³⁶. Having access to a transaction account is the first step toward broader financial inclusion since a transaction account allows people to store money and send and receive payments. It is crucial to notice that financial inclusion is significant to achieve Sustainable Development Goals³⁷ developed by the United Nations.

There is also a huge demand in financial education of the society. There is a strong link between financial education and the level of well-being and proper understanding of financial mechanisms in public and private sphere.

It is imperative to ensure that a Financial Education and Inclusion Strategy is developed for Moldova (MEFIS). This strategy should cover e-commerce issues and other important issues connected with finance and digitalization that would lead to better e-financial literacy and financial inclusion of people from different groups all around the country.

³³ <https://www.bloomberg.com/news/articles/2020-07-14/the-costs-of-an-increasingly-cashless-economy>

³⁴ Medical and public health experts say there is currently little data to support this and that cash is safe to use as long as people wash their hands.

³⁵ <http://documents1.worldbank.org/curated/en/486541556177550649/pdf/Leveraging-Digital-Financial-Solutions-to-Promote-Formal-Business-Participation.pdf>

³⁶ <https://www.worldbank.org/en/topic/financialinclusion/overview>

³⁷ <https://sdgs.un.org/goals>

The link with the “whitening” of the economy

There is a strong link between the cashless economy and the diminishing of the informal economy.

According to World Bank Group³⁸, digital financial services may also help break down one of the remaining impediments to full financial inclusion: the informal nature of many businesses worldwide. Although financial inclusion is particularly beneficial to entrepreneurs, most micro-small- and medium-sized enterprises (MSMEs) do not participate in the formal financial system. Business-owners are often skeptical that the costs of formality, including paying taxes and abiding by regulations, are outweighed by the benefits. However, the evidence shows that formality can help firms enter new markets, join global value chains, reach foreign buyers, or access credit. For workers, being part of the formal economy offers legal protections and social benefits that are often otherwise lacking. In other words, formalization enables economic inclusion. And given that women own many MSMEs, informality among small firms also represents a missed opportunity to close the gender gap in access to financial services.

National Bureau of Statistics webpage³⁹ shows us that undeclared work among employees accounted for 7.2% in 2019. The practice of hiring without completing individual employment contracts (based on verbal agreements) is more common among male employees (9.1%) than female employees (5.6%). The largest shares of employees, who work only based on verbal agreements, are estimated in agriculture (48.3%), trade (16.0%), construction (15.3%), and industry (6.4%). In the informal sector, 16.8% of all people employed in the economy worked, and 23.1% had an informal job. Of the number of people employed informally, 26.0% were employees. In the non-agricultural sector, the share of informal employment was 12.2%. Out of the total number of employees, 7.7% had an informal job. Salary "in an envelope" received 7.8% of employees, and their highest shares are estimated for activities in agriculture (50.6%), trade (15.3%), construction (14.2%), and industry (6.6%).

In their State of the Country Report 2019⁴⁰, Independent Think-Thank Expert Grup stipulated that in 2019, as employment has increased, informal employment grew too. In 2018, the share of informal employees in the total employed population reached 38.5 percent. Indeed, tax reform has further curbed the dynamics of informal employment. Thus, due to tax cuts, the informal sector lost 11,500 people in Q4:2018 and 16,900 people in Q1:2019.

According to the same Report, when it comes to decreasing the informal economy's size, the standard approach of the Moldovan authorities is de facto limited to cutting taxes. Both the 2007 tax reform (introducing the 'zero' tax on profit) and that from 2018 (cutting the social contributions paid by employers and moving to a single income tax rate for individuals) were supported by the need to reduce the informal economy. Despite the lower tax burden, the approach to employee nutrition, which, to a certain extent, has been solved by the deductibility of allowances for employees' meals, as stipulated in Government Decision no. 693 of 11.07.2018 and in the Law on Meal Vouchers no 166 of 21.09.2017. According to the study performed in 2019 electronic meal vouchers was unique incentive that Moldavian Government has implemented for increasing cashless economy. The employees have been obliged to spend their meal vouchers using POS terminals therefore 1 MDL Meals Voucher used in retail system created at least 0.252 MDL tax payments. And it became instrument that taught employees card as payment solution in shops but not only as instrument for the cash withdrawal

According to German Economic Team Report⁴¹, the reasons for the limited use of cashless payments are (1) old habits are more consistent; (2) Costs of cashless payment services; (3) Prevalence of informal transactions in specific sectors.

To achieve the earlier mentioned Goal, Four "C" principles that were mentioned in Chapter 3 should

³⁸ <http://documents1.worldbank.org/curated/en/486541556177550649/pdf/Leveraging-Digital-Financial-Solutions-to-Promote-Formal-Business-Participation.pdf>

³⁹ <https://statistica.gov.md/newsview.php?l=ro&idc=168&id=6617&parent=0>

⁴⁰ https://www.expert-grup.org/media/k2/attachments/Raport_2019_en_compilat.pdf

⁴¹ https://www.get-moldau.de/wordpress/wp-content/uploads/2016/06/PP_02_2016_rom.pdf

be followed (convenient – it should be comfortable and proper to operate with; cost-efficient – it should be cheaper than another way of operating; common – there should be a lot of knowledge about how everything works; custom – people should get used with this kind of modus operandi).

Individuals are in the middle.

One of the most significant sources of cash in the economy comes from individuals and their activities.

There is a general tendency that if an individual is paid by cash – (s)he will try to spend that money in the places where cash is a common rule (markets, small next-door shops, and so on). On the other hand, if an individual would find that it is much easy and safe to use electronic payments (either cards or any of the alternatives offered by PSPs) or would not have another choice than to make an electronic payment for a purchase (s)he will consider operating more electronically. More than that, if a habit of using electronic payments is developed, a person will look for the places where it is possible to use them or claim for them at the marketplace or small next-door shops.

Thus, some simple measures should be taken to ensure the rule expressed before will work.

First, **the source of cash should be tackled.** Some limitations should be taken to oblige the transfer of salaries only by using electronic payments. An excellent formula could be to oblige legal entities paying an individual wage and has more than five employees to do it electronically, precisely how it is done with tax reports. Also, VAT subjects could be obliged to do the same, no matter how many employees are. PwC also proposed some limitations to salary payment in their report to the MoF regarding the shadow economy.

It is essential to mention that an individual should have the chance to choose an electronic payment provider (bank or wallet, which bank and which wallet, and so on) because the main idea is to make the individual have them in the electronic place (s)he would use it also electronically for payments.

Other sources are payments other than salaries (payments for purchasing goods and services from individuals, dividends, royalties, some professional payments, and so on). There is a need for some limitations here also. For example, it could be mentioned that if the number of payments exceeds a particular value, it should be provided electronically by considering a maximum cap per year/month of such transactions.

Second, the way in which payments are made by individuals should be tackled.

Here, of course, the central role is to do everything possible to extend electronic payments in small next-door shops and markets. The proposed Chapter 3 mechanism of cashback + subsidy instead of VAT decrease could work very well here because it will cover merchant fees. It will motivate individuals to shop where they can receive the cashback or ask for this possibility there where it is still not. Or there should be a possibility to cash-in the card at POS terminals created and appropriately regulated.

Also, there should be a clear vision of how the state will involve more and more business activities in electronic payment solutions. A straightforward motivation for the state authority to take action should be mentioned: electronic payments are trackable. That means that there is a very little chance, comparing with cash circulation, that the money will become or will be used in illegal activities or that the money will disappear. So, the interest from the state bodies here should be a huge one. But all the action should be taken based on a clear vision and analysis of the market and merchant and consumers' behavior. Otherwise, a vice versa effect could come into force.

In the same block, some clarification should be provided by the MoF and STS regarding the documentation of different innovative alternative payment processes. There are some issues in the understanding of the services offered by the PSPs, which led to uncertainty and fear in the

implementation of innovative technologies that would reduce cash circulation in the economy.

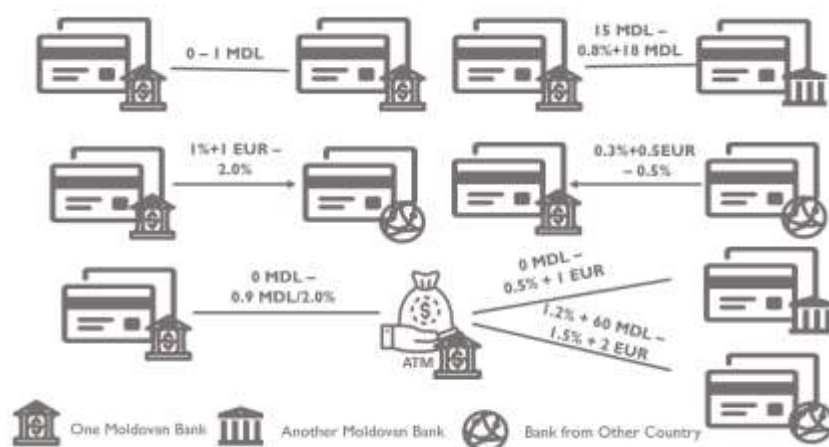
Another essential block of payments made by individuals is to the budget. Here the legislation and the infrastructure (MPay System) is developing rapidly to ensure that all the cost to the state budget (taxes – only electronically, fees, payment for requested services, and so on) will be provided via electronic payments. There are plans, deadlines, and promising initiatives to make it work properly with the state budget payments.

Still, there are payments to the budget, which always are provided almost exclusively by cash, and it is referred to local budgets. There are many services offered by local budgets that should be provided using electronic payments, including notary services provided by municipalities. In the authors' opinion, some necessary steps should be taken here to digitalizing those services and to implement an electronic payment system as mandatory as possible. MPay could be a brilliant choice here for performing this job. A similar idea was also proposed by the German Economic Team and Expert Grup in their studies.

The money circulated through individual-to-individual transactions referring to some achievements and selling of goods that should be appropriately registered should also be considered. Here, it is referred to some sell-buy operations made at the notaries (apartments, houses, cars), where a significant amount of money is negotiated. In the authors' opinion, all the transactions that require, for example, notarial approval, should be made electronically in the notary office (now it is the same procedure, but no mandatory request for doing it electronically is in place for now).

Peer to Peer transactions (P2P) is also an essential page in a cashless economy. Except for some pure transfers between individuals, there are a lot of business purpose transactions provided through P2P transfers. By growing some electronic payment habits at this stage, we could be sure that at the moment the business will boost the appetite to use electronic payment should remain at least the same, and this will be led to a new generation of legal entities that are preferring electronic payments instead of cash. It is essential to estimate costs that are supported by them.

Figure 11. P2P transactions: costs



Source: Made by the authors

There are some relevant costs in banking for individuals that should be considering also.

Table 9. Other relevant costs in banking for individuals

TYPE OF THE SERVICE PROVIDED BY THE BANK	THE FEE
The value of the annual administration fee for the individual	0 – 10 EUR/month
Subscription and annual cost of using the Online Banking customer service for an individual	0 MDL

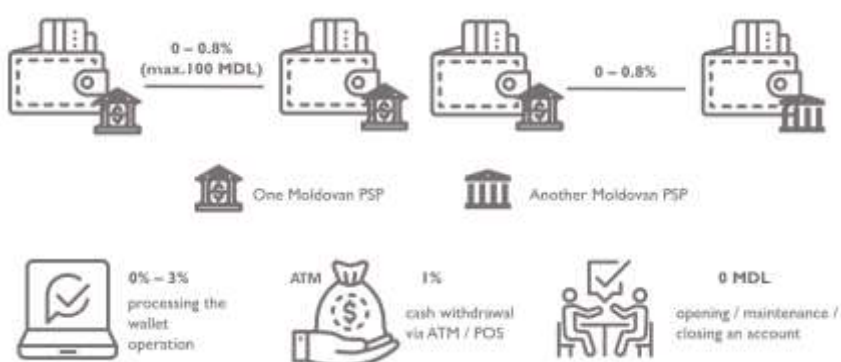
Subscription and annual cost of using the Mobile Banking customer service for an individual	0 MDL
Open a current account for the individual	0 MDL (at the bank's branch - 50 MDL)
The administration of a current account for the individual	0 MDL
Close a current account for the individual	0 – 100 MDL
The value of the maximum ATM withdrawal amount per transaction and per day	Aprox. 1000 EUR per 24 hours

Source: Made by the authors based on the Survey

Based on the survey information, you can conclude that there is not a big financial burn on the individuals dealing in P2P transactions, except that for the P2P information sender should know or Personal ID number of the beneficiary or full payment card number

Here it is essential to estimate costs not just for the bank sector but also for alternative payment solutions like a digital wallet.

Figure 12. Digital wallet costs for PSP



Source: Made by the authors

Business Activities and Cashless

One of the most popular and, in the authors' opinion, efficient measures are cash limitation in the transaction between legal entities with each other and with individuals. The German Economic Team, as well as Expert Grup reports also confirms it.

The MoF took some essential steps in the Tax and Customs Policy for 2021 for cash limitation. But still, there is enough place for improvement not to consider this option like a very workable one.

Another essential thing to mention here is that there is a need to implement electronic payment mechanisms at some specific activities traditionally provided just by cash and to make it mandatory. Here it is referred to small entrepreneurs who are doing their business activity by using "Patent" or in a special tax regime "Independent activity"

To ensure that individuals who are buying from them can use electronic payments for paying and ensure that the legal provisions are followed (entrepreneurial patent could not be any more Patent if their turnover is exciding a specific amount). " An QR code payment system could be implemented in local markets ("piata") instead of the cash register machines.

Another critical issue is a practice in the shops where some discounts are offered, or the different price strategy is applied if you pay by cash (it is stimulating to pay by cash).

A prohibition by law should be applied for announcing a different price to cash vs. non-cash trading in terms of facilitating cash transactions, including the prohibition of offering rebates, discounts, or other forms of price reduction facilitation of the use of cash. An obligation of the publishing ACPMS's

contacts and application of the doubled discounts is such case comparing to the cash payment could resolve the issue

In the end, we should understand that building a cashless economy is not a short and straightforward process, and it is necessary to have a general understanding and commitment to make it real from the state authorities, legal entities, and, of course, individuals.

RECOMMENDATIONS: THE MATRIX

STATUS-QUO						
CHI/1	Definition of e-commerce	MoEI	The definition of e-commerce should be reconsidered to clarify this framework	Will give a good understanding of e-commerce perspective	High	Short
CHI/2	Dedicated courses in e-commerce	MoEI, ODIMM	Courses should be organized by those who are working in any phases of e-commerce circle	Will ensure that those who are considering e-commerce could find info from the first source and to establish useful contacts with specialized companies	High	Short
DECISION TO CREATE AN ONLINE SHOP						
CH2/1	Guidance for merchants and customers for e-Commerce	ACPMS, NBM	Elaboration by ACPMS of a small guide for the e-Commerce Customer ensures that both customers and merchants are knowledgeable about all the requirements and tips that should be considered in e-Commerce. The guide should be consulted with Business Associations and representatives of the e-Commerce	Will decrease the number of mistakes performed by the Merchants and by the customer, as a result, will reduce the number of complaints.	Medium	Short

			Publication of such guide on e-Commerce platforms should be obligatory and verified by PSP			
CH2/2	Guidance on the revision of the customers' electronic consent	NCPDP	National Center for Personal Data Protection should draft a guideline explaining businesses as personal data operators and for consumers what are other lawful grounds when prior and additional consent is not required.	Will eliminate the risks and will give additional development of the correct usage of the law by the Merchants	High	High
CH2/3	eKYC Guidance or Acceptance Rules	NCPDP, OPCML, BNM	There should be some clear rules on how eKYC should or could work. In this case, there should be two scenarios: either to elaborate special guidance on KYC Rules or to establish a process of acceptance of the rules adopted by an interested party. If there are some legal impediments in involving third parties, the law should be respectively amended.	It will lead to a more significant financial inclusion of different parts of the country and contribute to the internationalization of developed in Moldova solutions. Also, it will give options to distance financial interactions between relatives.	High	Short
CH2/4	Adjust of legal regulations to improve customer experience	MoEI, NCPDP	There shall be in place more explanations on the applicability of the Law no. 133/2011.	Will eliminate the risks and will give additional development of the correct usage of the law by the Merchants	High	High
PAYMENT SOLUTIONS						
CH3/1	Transparency in the policy of opening an account and about e-commerce	NBM	Some regulations on transparency and clear rules for account opening rollover deposit	Will decrease the cost of e-commerce.	High	Short

	solutions		applied by PSP and Banks for the merchants should be elaborated with the obligation of its revision at least once per quarter.			
CH3/2	Cap on rollover deposits for e-commerce	NBM	To develop e-commerce, it is mandatory to reconsider the risks that stand behind the decision to apply on rollover deposits. It should not exceed 3% ad value and not exceeding two months.	It will lead to a more dynamic transactions matrix and boost all involved in e-commerce parties.	High	Medium
CH3/3	Subvention and Cashback Scheme (SCS)	MoF	Instead of VAT standard rate decrease, the cashback to the account of individual persons using electronic payment methods should be given (3% per transaction). On the other hand, to compensate merchant fees, a subvention of 3% per transaction should be offered.	It will motivate individuals to use electronic payments and claim for this solution if there are no such options. On the other hand, 3% will cover merchant fees for merchants, which could motivate them to offer electronic payment solutions to their customers.	High	Short
CH3/4	A single document for the transaction (POS and CRM)	MoF, STS	The processing of the bank card by POS Terminal should be done together with issuing a "Bon fiscal" from the cash register machine. It is no need to give a "Bon fiscal" if the transaction is made electronically. The only exception should be in the case of direct requests by the customer.	It will diminish the costs of compliance and time for processing the transactions.	Medium	Medium

CH3/5	Supporting financial funds for payment solutions and other Fintech ideas	MoEI, MoF, ODIMM	The supporting lines should be implemented on the state level or in partnership with international donors or interested companies to support and finance innovative initiatives in this area.	Will create a large pool of options for people to move from cash-based purchases to cashless.	Medium	Medium
CH3/6	“Domestic” special regime	NBM	The instant payment system should be implemented as soon as possible. Also, a tentative schedule of implementation of it should be available on the public resources.	Will decrease costs on the transactions	High	Long
CH3/7	Special interchange fee for some transactions	NBM, MoF	The negotiations should be started with Visa and Mastercard on some special regime for government payments, utilities, social payments, and so on to receive a lower rate on transactions.	Will decrease costs on the transactions	High	Short
CH3/8	Causes of rejection to process the merchant's request should be published	MoEI, NBM	There should be some clear understanding of the causes of rejection to process the merchant's request to the system of direct acceptances of payments integrated on its website. These causes should be published. Some regulations should be made here.	A clear understanding of the processes of the e-commerce scheme.	Medium	Medium

CH3/9	Implementing of the FinTech Hub	NBM, NCFM, MoF, ATIC	It should be a contact point in order to assist FinTehs in their activity by offering requested non-binding guidelines with regard to the compliance of innovative products and services with legal requirements in force.	Will facilitate the development of FinTech companies	High	Medium
CH3/10	Elaboration of the concept of a “SANDBOX” mechanism	NBM, NCFM, MoF, ATIC	It is important to create a virtual space where FinTechs could test their products and their activity by having some special treatment by regulatory main bodies during this.	Will facilitate the development of FinTech companies	Medium	Medium
LOGISTICS						
CH4/1	IOSS registration for export in EU by Made in Moldova	MIEPO, Specialized NGO	Creation of the joint possibility for SMEs for export in EU via registration of the IOSS for Made in Moldova. Specialized NGOs will be the initiator for the local SMEs' pool for post-delivery and EU VAT registration via IOSS.	Reduction of the costs for export on the EU market	High	Medium
CH4/2	Day-by-day workers regime for courier services	MoEI, MoF	Post-delivery or courier service providers that have software for couriers with real-time identification could employ couriers as day-by-day regime (zilieri) for their delivery of the goods in the case if it is not used private transport, but only public	Will allow to develop such services and also will be used as a possibility for the employment for short term for the youth.	High	Medium

			or bicycle.			
CH4/3	Training (certifications) on Customs procedures for companies	MoF, CS	Because companies are fully responsible for the declarant's mistakes, the particular pieces of training performed by the Customs (with corresponded certification) need cost optimization and not only.	It will reduce the risk and increase trust in such a solution compared to the full outsourced Broker services.		
CH4/4	Obtaining status of the Authorized Economic Operator (A.E.O.)	Posta Moldovei,, Other post operators	Will reduce the customs clearance time and costs and will increase trust in the Posta Moldoveia as service provider for the export activity	Will reduce the customs clearance time and costs and will increase trust in the Posta Moldovei as service provider for the export activity	Medium	Medium
CH4/5	Implementation of the Customs Data Systems	MoEI, MoF, Customs Service, Pota Moldovei	Development of the CDS module in ASYCUDA by Customs Services and connection of the Posta Moldovei services to that systems	Will allow direct connection for the international tracking of the parcels and additionally will reduce costs on customs clearance for around 20 countries	High	Medium
REPORTING AND OTHER COMPLIANCE MEASURES						
CH5/1	Rethinking of the local tax for e-Commerce and obligation of the notification of the trading commencement	MoEI, MoF	Only e-commerce activity with no offline activity should be liable for notification and, as a result, for the local tax based on the warehouse's location or fulfillment services. Marketplaces pay only intermediary tax.	Will eliminate the risk of the start of the business for the SME that has offline activity.	High	Short
CH5/2	Electronic signature	STISC, CTIF, Posta	Posta Moldovei gets the agent's	As a result, it will	Medium	Short

	facilitated by Posta Moldovei	Moldovei	status that will be responsible for the delivery of the electronic signatures.	reduce transport costs and increase the number of electronic signatures.		
CH5/3	Automatic update of e-signature	EGov, STISC, CTIF, SIS	On distance issue (reconfirmation) of electronic signature via MCabinet premises	Will reduce costs and allow interested parties who cannot travel to the issuing point to do it remotely.	Medium	Medium
CH5/4	An accounting and tax guide on e-commerce including payment solutions	MoF, STS, specialized NGOs	The guide should give a simple and understanding explanation on the most important subjects: what accountant system should be applied, what tax regime is more suitable based on the business model, what options are for proper compliance to tax rules, and so on.	Will ensure the right framework of understanding tax and accountant realities for merchants, PPSs, and others relevant to e-commerce parties.	High	Short
SPECIAL CHAPTER ON CASHLESS ECONOMY AND FINANCIAL INCLUSION						
CH6/1	e-Bon fiscal issued by "Fiscal Gateway"	MoF, SFS, ACPMS	The "e-Bon fiscal" issued by Fiscal Gateway computer system of the State Fiscal Service confirms e-transaction without any extra paper involved (regular recipe published by CRM). Also, it will eliminate tax receipt for the cash-on-delivery solution when the post-service provider provides service, and information is stored via Gateway fiscal (Electronic Reimbursement ticket)	It will boost the development of e-commerce because the compliance part becomes easy and straightforward.	High	Short
CH6/2	Adjust Patent for e-	MoEI, MOF	Adjust existing types of patents	Will reduce the	Low	Short

	commerce		with the higher monthly rate that covers all Republic of Moldova territory and has a higher allowed limit up to 600.000 MDL per 12 consecutive months but with the obligation to collect the payment only using online payment solutions. No CRM is needed.	number of informal activity, will allow person official to start e-commerce activity.		
CH6/3	Adjust independent activity for e-commerce	MoF, MoEI	To allow such activity with the obligation to use online payment solution for the sales that are not exceeding 900.000 MDL pe tax period without the usage of the cash register machine. No CRM is needed.	Will reduce the number of informal activity, will allow person official to start e-commerce activity.	High	Short
CH6/4	Online payment systems mandatory for individual merchant activity	MoF, MoEI, NBM	Small merchants who are doing their business activity using "Patent" or in a special tax regime "Independent activity." should use electronic payment system mandatory in their activity and connect it to Fiscal Gateway at STS.	It will ensure that taxpayers have a chance to spend their money in electronic payment systems almost everywhere and especially in the places cash is still viral (markets, next-door shops, and so on)	High	Short
CH6/5	Moldovan Education and Financial Inclusion Strategy (MEFIS)	NBM, MoF	This strategy should cover essential issues connected with finance and digitalization.	That would lead to better e-financial literacy and financial inclusion of people from different groups countrywide	Medium	Medium
CH6/6	Wages paid electronically	MoF	Legal entities should be obliged	It will place money	High	Short

	at the convenience of employees		to pay wages if they have more than five employees electronically, precisely how it is done with tax reports. Also, VAT subjects should be obliged to do the same, no matter how many employees they have. An individual should have the chance to choose an electronic payment provider (bank or wallet, which bank and which wallet, and so on)	for wages (the core source of income) directly to electronic options. The main idea is to make the individual have them in the electronic place (s)he would use it also electronically for payments.		
CH6/7	Other sources are going electronically with a threshold	MoF	Other than salaries, income sources (payments for purchasing goods and services from individuals, dividends, royalties, some professional fees, and so on) should be also be paid electronically. There is a need for some limitations here also. For example for the payments performed according to art 90 of Tax Code, it could be mentioned that if the number of payments exceeds a particular value, it should be provided electronically by taking into account a maximum cap per year/month of such transactions. At the same time for payments mentioned in art 90.1 of Tax Code (dividends, rent payments to individuals, royalty, cash donations) such threshold could be reduced to 0.	The same as previous, except it is a different source of income.	Medium	Medium

<p>CH6/8</p>	<p>No discounts for cash payment</p>	<p>MoEI, ACPMS</p>	<p>The practice of the shops that offer discounts or the different price strategy if you pay by cash (it is stimulating to pay by cash) should be abolished by introducing a prohibition in the law regarding announcing a different price to money vs. non-cash trading in terms of facilitating cash transactions, including the prohibition of offering rebates, discounts, or other forms of price reduction facilitation of the use of cash.</p>	<p>It will stimulate the cashless economy by eliminating artificial barriers.</p>	<p>High</p>	<p>Short</p>
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APPENDIX A. NUMBER AND VALUE OF TRANSACTIONS MADE WITH PAYMENT CARDS IN THE REPUBLIC OF MOLDOVA

				2017	2018	2019	1 st half of 2020
Issued in Moldova cards	Number of operations	non-cash payments	Total non-cash payments	22,024,558	33,711,639	50,917,837	31,204,332
			debit card	20,863,057	32,279,998	48,848,364	30,011,100
			credit card	1,161,501	1,431,641	2,069,473	1,193,232
			Visa	11,015,751	16,652,537	26,872,522	16,815,551
			MasterCard	12,954,038	16,992,438	24,000,975	14,371,100
			American Express	29,212	66,664	44,340	17,681
			in the banks' own network (on-us)	7,279,223	10,704,008	17,322,572	12,101,638
			in the network of other Moldovan banks	8,806,228	13,094,583	20,011,385	13,502,061
			Abroad	5,939,107	9,913,048	13,583,880	5,600,633
			with the physical presence of the card	13,466,096	19,958,635	31,681,316	20,101,828
			without the physical presence of the card: e-commerce platforms	4,747,997	8,032,599	10,967,194	5,178,542
		without the physical presence of the card: automated remote service systems	3,613,855	5,315,097	7,518,877	5,301,696	
		others*	196,610	405,308	750,450	622,266	
		cash withdrawal	Total cash withdrawal	24,506,667	26,718,675	28,245,826	12,213,767
	debit card		23,727,996	25,998,910	27,509,334	11,924,513	
	credit card		778,671	719,765	736,492	289,254	
	Visa		11,032,202	12,802,948	14,458,078	6,496,669	
	MasterCard		13,472,985	13,913,837	13,786,034	5,716,482	
	American Express		1,480	1,890	1,714	616	
	in the banks' own network (on-us)		23,250,985	25,138,040	26,369,914	11,371,147	
	in the network of other Moldovan banks		1,033,409	1,323,904	1,604,403	749,777	
	Abroad	222,273	256,731	271,509	92,843		
	Total number of operations		46,531,225	60,430,314	79,163,663	43,418,099	
	The value of the operations (MDL)	non-cash payments	Total non-cash payments	8,893,212,114	12,270,325,258	17,208,032,297	9,701,124,753
			debit card	8,316,721,481	11,618,755,314	16,302,478,159	9,242,477,888
			credit card	576,490,633	651,569,944	905,554,138	458,646,865
			Visa	4,557,141,533	6,463,948,432	9,256,274,331	5,350,629,001
MasterCard			4,308,466,216	5,761,000,483	7,927,743,770	4,342,126,546	
American Express			27,604,365	45,376,343	24,014,196	8,369,206	

			in the banks' own network (on-us)	2,066,006,298	3,067,195,812	4,755,388,656	3,512,662,165
			in the network of other Moldovan banks	2,781,146,583	3,967,320,492	5,782,175,242	3,657,631,682
			Abroad	4,046,059,233	5,235,808,954	6,670,468,399	2,530,830,906
			with the physical presence of the card	5,108,822,248	6,922,036,983	9,763,444,401	5,396,468,979
			without the physical presence of the card: e-commerce platforms	2,571,113,052	3,488,897,863	4,625,437,059	2,183,745,511
			without the physical presence of the card: automated remote service systems	897,255,593	1,461,497,210	2,239,954,789	1,795,634,324
			others*	316,021,221	397,893,202	579,196,048	325,275,939
		cash withdrawal	Total cash withdrawal	40,705,791,426	45,580,319,373	52,203,215,771	24,639,078,077
			debit card	39,416,021,133	44,324,455,968	50,843,445,477	24,114,220,828
			credit card	1,289,770,293	1,255,863,405	1,359,770,294	524,857,249
			Visa	19,680,281,225	22,849,796,584	27,881,029,284	13,615,736,565
			MasterCard	21,020,974,160	22,725,968,178	24,317,787,951	11,020,901,938
			American Express	4,536,042	4,554,611	4,398,536	2,439,574
			in the banks' own network (on-us)	39,222,749,243	43,751,079,896	49,921,788,739	23,494,178,796
		in the network of other Moldovan banks	825,311,183	1,132,655,376	1,500,745,804	805,081,142	
Abroad	657,731,001	696,584,101	780,681,228	339,818,139			
	Total value of the operations	49,599,003,540	57,850,644,631	69,411,248,068	34,340,202,830		
Issued abroad cards	Number of operations	non-cash payments	Total non-cash payments	3,506,015	4,907,754	6,158,186	3,139,191
			Visa	2,097,952	2,723,622	2,648,815	1,310,307
			MasterCard	1,400,109	2,174,311	3,499,260	1,826,584
			American Express	7,954	9,821	10,111	2,300
			with the physical presence of the card	2,215,351	3,483,647	5,416,520	2,740,086
		without the physical presence of the card	1,290,664	1,424,107	741,666	399,105	
		cash withdrawal	Total cash withdrawal	1,415,612	1,593,761	1,829,597	804,461
			Visa	753,936	813,368	890,409	409,207
			MasterCard	660,737	779,593	938,397	395,066
			American Express	939	800	791	188
	Total number of operations		4,921,547	6,501,515	7,987,783	3,943,652	
	The value of the operations (MDL)	non-cash payments	Total non-cash payments	2,954,489,014	3,379,608,412	4,044,462,123	1,506,400,482
			Visa	1,683,004,563	1,955,687,854	2,187,566,152	793,266,452
			MasterCard	1,243,109,964	1,394,112,995	1,826,397,054	707,907,783
			American Express	28,374,487	29,807,563	30,498,917	5,226,247
with the physical presence of the card			1,776,657,133	2,005,924,420	2,728,798,909	1,065,542,639	
without the physical presence of the card			1,177,831,880	1,373,683,992	1,315,663,214	440,857,843	
cash		Total cash withdrawal	3,763,315,348	3,868,476,800	4,589,623,933	2,146,056,015	

	withdrawal	Visa	1,861,221,016	1,900,005,451	2,249,850,031	1,108,727,792
		MasterCard	1,899,383,975	1,966,102,881	2,334,981,443	1,036,368,772
		American Express	2,710,358	2,368,468	4,792,459	959,451
		Total value of the operations	6,717,342,951	7,248,085,212	8,634,086,056	3,652,456,497

APPENDIX B. DETAILS ON THE EUROPEAN COMMISSION ANTITRUST INVESTIGATIONS CONDUCTED IN THE PAYMENT CARD MARKET, TARGETING MULTILATERAL INTERCHANGE FEES

In 2007, the Commission issued a decision against **MasterCard** MIFs applicable to cross-border payment card transactions with MasterCard and Maestro consumer debit and credit cards in the European Economic Area (EEA). MasterCard appealed the Decision to the General Court and in April 2009 unilaterally undertook to set its cross-border MIFs at 0.2% for debit cards and 0.3% for credit cards and amending other rules and practices. On 11 September 2014, the European Court of Justice (case C-382/12P⁴²) confirmed that MasterCard's inter-bank fees for cross-border payment transactions in the European Economic Area (EEA) restrict competition in the Internal Market, in breach of EU competition rules (MEMO/14/528⁴³).

Following the expiry of an exemption decision in December 2007 and the adoption of the MasterCard Decision the Commission opened an antitrust investigation against **Visa Europe**, Visa Inc. and Visa International Service Association in 2010. Similarly, to MasterCard's undertakings in 2009, Visa's commitments also provide for several measures to increase transparency and competition in the payment cards markets, which are an important complement to the proposed MIF reduction. Following the 2010 Visa decision which addressed the Commission's objections in respect of MIF for consumer debit cards, in 2014 the Commission adopted a decision-making binding additional commitment from Visa Europe. Under these commitments, Visa Europe agreed to reduce to 0.3% the maximum weighted average MIF for consumer credit cards for Intra-EEA transactions, national transactions in those EEA countries where Visa Europe sets consumer credit MIF rates directly and for transactions with merchants located in the EEA with Visa credit cards issued outside the EEA but within the Visa Europe territory. In addition, Visa Europe committed to apply the debit 0.2% cap to all MIFs set by Visa Europe for transactions with merchants located in the EEA with Visa debit cards issued outside the EEA but within the Visa Europe territory.

⁴² <http://curia.europa.eu/juris/liste.jsf?language=en&jur=C,T,F&num=C-382/12%20P&td=ALL>

⁴³ https://ec.europa.eu/commission/presscorner/detail/en/MEMO_14_528