



INTERVALE

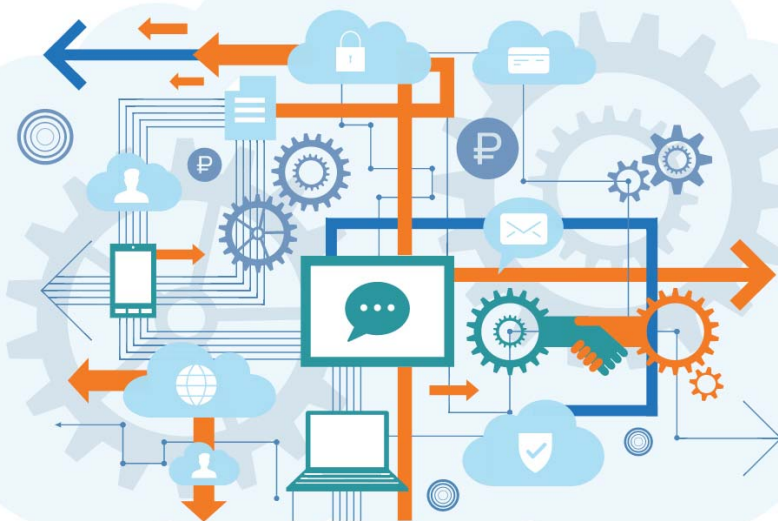
Development of Digital Financial Services

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1. Intervale

Intervale – Mobile market player since 1999:

- ➔ **Over 15 years of product development for secure remote payments and services**
- ➔ **Development license granted by Visa International Service Association to use 3-D Secure technology** as well as develop payment solutions using the technology.
- ➔ **Our Customers:** leading financial institutions, mobile operators and other businesses across Russia, Ukraine, Kazakhstan, Georgia, Belorussia and Eastern Europe.



- **First to launch in Russia in 2002** with VISA and Sberbank support **mobile payment wallet**
- **First to launch and implement in Russia internet acquiring solution.**
- **MTS and Megafon (Russian biggest MNO-s) have been using our mobile commerce platform technologies from 2008.**
- **MasterCard Mobile service provider in Russia**
- March 2015, Mobile World Congress – Pay Up presentation. **Pay-Up is a mobile payment instrument**, which can substitute payment and loyalty cards as well as cash.

2. Intervale - Active member of ITU



INTERVALE

- **Member of ITU-D** (Telecommunication Development sector)
- **Developed two standards in the field of the secure mobile payments, approved by ITU-T as world standards**
- At the initiative of Intervale, **the Resolution 72 "More effective utilisation of mobile communication services"**
- *The Resolution emphasises the role of mobile communications in provision of services, such as mobile e-government, mobile e-medicine, mobile money transfers, mobile payments and mobile banking, etc.*
- **Member the Advisory Board of the ITU global initiative "m-Powering Development"**
- *The initiative aims to promote mobile technologies in commerce, education, health care, financial services and other services for the purpose of social and economic development of urban, rural and remote rural areas.*
- The World Telecommunication Development Conference elected Intervale Deputy General Director as Vice-Chairman for ITU-D Study Group 2,
- Active participants of the **new Focus Group of the ITU Standardization Sector for Digital Financial Services**

3. Trends and tendencies of Russian Mobile Payment Market (part 1)

Russian Retail Payment Market currently looks as follows:

1. Retail payment market (not only mobile)



Russian retail payment market today can be described by four main streams:

- Electronic Money, More than 40m users
- Payment kiosks 283 000 units (2 000 per 1m people)
- Payment cards, 1.5 cards per capita
- MNO account payments, Around 20m customers

2. Russian Mobile Market



- Total number of mobile phone users: 140m (96% of population)
- 39% of telephones are smartphones
- Average monthly spending on mobile services (voice, SMS, mobile Internet) is 517 rub (10 USD)
- Approx. 90% of all MNO contracts are pre-paid (pay-as-you-go)
- Number of Mobile Commerce users is around 20m and growing
- M-commerce in Russia is a payment using an advance for communication services (or 'airtime')

3. Russian Payment System Regulation



- Mobile Money payments are regulated by the Russian Federal Law 161-FZ On National Payment System”
- As prescribed by the Article 13of the Law, the funds are first transferred to a bank, become e-money and then used for actual payment

3. Trends and tendencies of Russian Mobile Payment Market (part 2)

4. Cards, mobile and e-money, on-line and of-line



- **Card is a bespoke dominating payment instrument.**
- **All other payment instruments** (not cards) – electronic wallets, virtual currencies, bonus points programs are in on-line world
- Three cards processing providers have announced their **movement towards HCE** technology. **VISA and Golden Crown have announced pilot projects officially.**
- During the last 10 years Mobile Network Operators **have become strong competitors of banks in provision of mobile financial services to the public.**
- **Wallet providers, money transfer systems and many other market players have taken big part of the retail customers away from the banks** due to their ability to adopt quickly to the market challenges.

5. Where Russian Market is moving?

- 1) The mobile and retail market players in Russian will consolidate and merge with big banking groups
- 2) Most of the bank will switch to outsourcing of their remote banking services, because it will be difficult for them to compete with flexible of swift payment service providers
- 3) Payment functionality (both remote and proximity, in other words on-line and off-line) will go on migrating into mobile devices;
- 4) All sources of payments (cards, balances, bonus points, etc.) will migrate into smartphones as well;
- 5) E-money payment in off-line stores will become reality and Mobile Money balance with MNO will be used for internet and retail payments;
- 6) Mono-specialized applications or applications unifying multi-functional solutions under one single brand name;
- 7) Synergy effect from cooperation of mobile telephone producers, MNOs, banks and international payment systems. (Apple Pay, Samsung, Microsoft, etc.);

- *swiftly changing world of financial technologies makes all participants to be in good shape.*
- *Software providers, banks and payment service providers must **not only follow the market trends but also participate themselves in development if not standards but best practices**, which might in the nearest future turn into the play rules of the mobile payment industry*

4. What is proposed to do to keep up to date?

Open platform model of business

Open payment platforms – our proposition for the customers:



As of today it means:

- A number of acquiring banks;
- Open aggregation of payment services;
- Number of customers (cloud solutions, multi shop-window concept);
- Separate logic for each shop window functionality and features;
- Assembly line to connect new participants;
- Open API;
- Support of HCE technologies.

Which advantages does it provide our customers with?

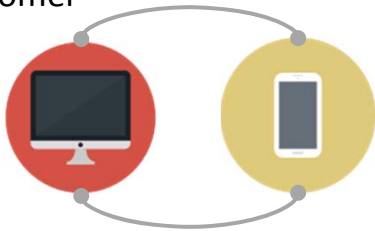
- Full-functional remote banking solution (web and mobile interfaces): payments, cards transfers, banking products support;
- Customer communications: SMS, push, Viber, new marketing channels in customer interfaces;
- Services in the volume and scope needed by the particular customer;
- Options to enlarge the number of services in a short period of time;
- Options to increase productivity and processing capacity of the services;
- All components of the proposed solution are always up to date.

4. What is proposed to do to keep up to date?

4.1 White label

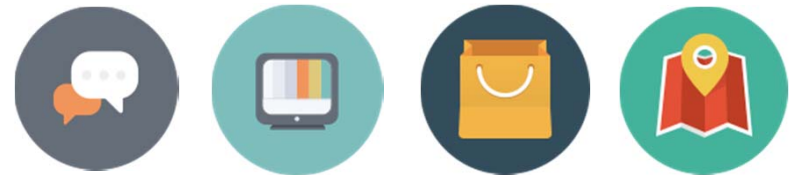
We provide separate payment services as while-labelled cloud based solution:

Basic set which contains **Web-page** and set of **mobile applications** ready for individual branding for particular customer



or

A number of **mono-specialised applications** which a customer can unite under one single umbrella brand into one product line.



Advantages of the specialized applications

- The user receives exactly what he or she needs (there is no feeling of imposed services and unnecessary complexity);
- More efficient implementation of application (UX, animation, logic);
- Localisation, update and release of new versions – easier and quicker;
- Cheaper and more efficient marketing.

Now any customer can get ready-made applications with payment functionality or built in separate services into the existing interfaces or applications

4. What is proposed to do to keep up to date?

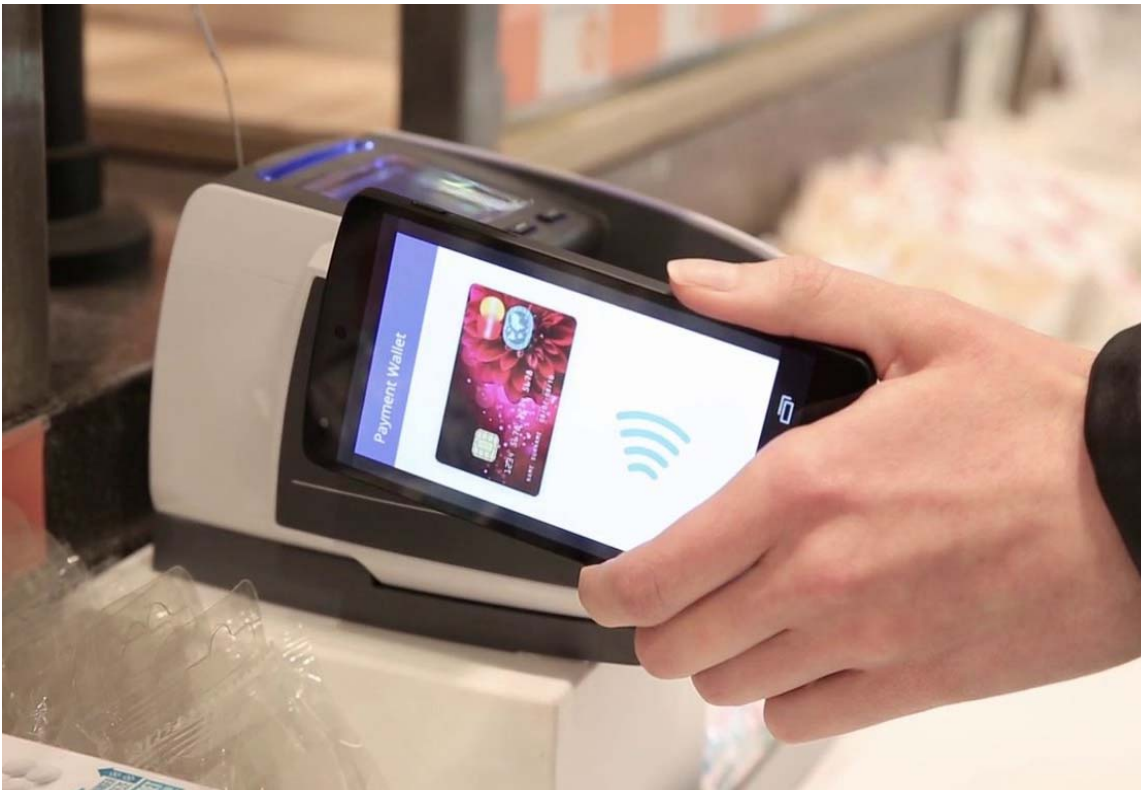
4.2 Contactless mobile payment and HCE

«Bonus points» of HCE technology:

Smartphone becomes new payment instrument (please, do not mix with payments from mobile money account, since card, issued by a bank, becomes source of payment in this case);

Download of the issued card into the telephone is cost-efficient for the bank. Besides there is no need for the bank to change current card issuing procedures. All workflow and the service including digitalisation and tokenisation, as well as issuing of the Mobile Payment Application is provided by the service-provider.

HCE – is also a new option for MNO's to go into off-line acquiring.



Cloud-based technologies of international payment systems incorporated into our platform make possible to:

- Issue PayPass/PayWave cards into mobile device and support of NFC technology;
- to accept and process authorisation and authentication requests of the mobile device holder;
- to implement DSRP (DIGITAL SECURE REMOTE PAYMENT) technology, allowing to make equal from the price and security perspective mobile device payment and EMV-card payments.

5. Conclusions: Ability to adopt promptly is key to success

TRENDS:



Services provided via Open API (open platforms and systems)



Mono-specialised mobile payment applications



Support of contactless technologies that are no longer MNO-centric or dependant

Ability to adapt quickly to the market challenges – key to your success

