

Fostering a Fintech Industry Growth in Latvia: Lessons to be Learned from the Successful Case of Alipay

Algimants KONTAUTS¹, Biruta SLOKA²

¹University of Latvia, Latvia

²University of Latvia, Latvia
algimkontas@yahoo.com

(Received May 2017, accepted Sep. 2017)

Abstract. With the development of financial technology, known collectively as Fintech, the world has undergone a revolutionary change in recent years. Payments are no longer monopolized by the banking industry and money is moving faster than ever. Nowadays, more and more Fintech products are widely used by people, in particularly the third party online payment. In this paper, ALIPAY is chosen as a successful and world-wide academically-discussed case to be analysed, as it owns the largest mobile payment market share in China. First, in-depth analysis of its business profile and social-economic impact are conducted; Subsequently, it expands deeper to the implications of ALIPAY's successful practices in Latvian market, in how to organize and support a Fintech initiative under cultural context.

Keywords: ALIPAY, China, Fintech, Latvia, Third-Party Payment Platform

1. Introduction

As its overall economy is rapidly growing, fueled by the fast development of the 3G/4G technology and a huge base of internet users, China has become the center in the global Fintech innovation and adoption. According to the global Fintech survey 2017, by PwC, China's digital payments account for almost half of the global volume and online peer-to-peer (P2P) lending accounts for three quarters of the global total; the penetration rate for financial services applications, such as mobile payment (67.5%), mobile banking (48%) and mobile stock trading/wealth management (7%) demonstrates huge potential.

As one of the most successful Fintech product in Chinese market, ALIPAY has been dominating Chinese third-party payment market since it was launched by the ALIBABA group (NYSE: BABA) in 2004. According to its official website, it has reached 520 million registered users and over 80 million transactions per day. Through a thorough analysis of its ecosystem and operation mechanism, together with the review of its environmental factors, the paper aims at detecting the successful practices by ALIPAY, to offer examples and possible implications for the developments of Fintech industry in the Latvian market.

Hypothesis of this research:

With appropriate policy support, market guidance and proper business strategy, Latvian market can develop a successful Fintech Product as ALIPAY.

Tasks of this research and Literature review:

- 1) To analyse the Eco-system of ALIPAY:
 - To analyse ALIPAY'S business model, including its products group, its profit model, and the successful factors; Some research works have been done in this direction by Cao, Y. et al., 2011, Cui, Y. et al., 2016, Du, J. et al., 2013, Jiang, X. et al., 2015, Leong, C. et al., 2017, Liu, R., 2015, Shen, W., 2012, Shen, W., 2012, Sim, Y., 2015, Xia, J., 2016;
 - To do the comparison analysis of ALIPAY with the traditional banking sector, including the relative advantages and potential threats; Some research works have been done in this direction have been done by Yu, Y., & Shen, M., 2015;
- 2) To analyse the Social-Economic impacts of ALIPAY:
 - To analyse the ALIPAY's impact, in general economy, and in development of general society; Some research works have been done in this direction have been done by Cao, Y. et al., 2012, Wang, X., 2012;
 - To analyse the legal risks of ALIPAY; Some research works have been done in this direction have been done by Chen, J. et al., 2015, Cheng, P. et al., 2010, Liu, Y., 2015;
- 3) To analyse the possible implication in Latvian market:
 - To compare the different environment factors that Fintech industry facing in Latvia and in China; Some research works have been done in this direction have been done by LIAA, 2017, PwC, 2017;
 - To conclude the successful indications for Latvian market from the case of ALIPAY.

Limitations of this research:

As ALIPAY is only a sub-branch of ALIBABA Group (NYSE: BABA), most of its data are not announced to the public through official channels. Available

data is limited to secondary data sourcing from news reports, scientific papers published in peer-reviewed scientific journals and online articles. In this research paper, data gathered via those sources has been cross-checked with the most relevant data presented in ALIBABA’s annual reports to achieve the maximum accuracy.

Methodology of Research:

Research methods in this research are mixed, using both quantitative method and qualitative methods. Quantitative analysis is conducted when analysing the economic impacts of ALIPAY, and qualitative analysis is used in the rest parts, mainly through case study, document analysis, and comparative analysis.

2. The eco-system of ALIPAY

2.1 ALIPAY and its products

In general, ALIPAY itself is a large ecosystem centered by online payment, it has 2 major products: the PC-end “ALIPAY.com” and Mobile-end “ALIPAY wallet”, under which there are many sub-products aiming to improve the user-experience, covering online payment, wealth management, shopping service, social communication, utility payments, charity, etc. This paper will analyze those products groups through 3 aspects: Products for individual customers, Products for Merchants, and relationships with the Banks.

For individual Customers:

Currently, there are 81 products available for individual customers. Generally, we can divide them into 4 groups: Cross-border online payments, transferring money, financing function, and Paying for daily expenses. As can be seen from table 1. “ALIPAY Products for Individual Customers”, started from payment with endowment, ALIPAY has expanded into all aspects of individual customers’ daily life.

Table 1. ALIPAY Products for Individual Customers

<p><i>Cross-border online payments</i> (*12)</p>	<p>This function enables ALIPAY users to make purchases on international merchants’ websites and in merchants’ apps with ALIPAY. Products include: Basic Online Payment(网银支付), Fast payment(快捷支付), Mobile payment(手机支付), Scan-code payment (扫码支付), Link to pay by other account(找人代付), Pay for other accounts(为他人充值), Pay for family(亲密付), Payment by identity of voice(声波支付), NFC</p>
--	--

	<p>payment(近场支付),payment from smart TV(互联网电视支付), payment by identity of fingerprint(指纹支付), Barter payment(空付) .</p>
Transferring money (*15)	<p>By using ALIPAY, transfers can be made from one ALIPAY online account to another account or from the online account to a bank account (via a debit card). Products include: Transfer to Bank Card(转账到银行卡), Transfer to other account(转账付款), Receive transfer(AA 收款,我要收款), International Transfer(国际汇款), Transfer with endowments(担保收款,担保付款, 担保悬赏, 担保买卖), Repayment (信用卡还款, 网购还款, 还贷款, 助学贷款还款, 淘宝贷款还款), Donation(爱心捐赠).</p>
Financing function (*5)	<p>The users can save the money in the ALIPAY and receive some revenue on a regular basis. Products include: Wealth management (余额宝, 定期理财), Small Loan (淘宝贷款, 阿里小贷), Insurance(我的保障).</p>
Paying for daily expenses (*49)	<p>People can pay family or personal bills using ALIPAY online such as water and electricity bills. Products include: Bills payment (水电煤缴费, 手机充值, 话费卡转让, 校园一卡通, 教育缴费, 交通罚款代办, 加油卡充值, 物业缴费, 网上营业厅, 医院挂号, 有线电视缴费, 固话宽带), Tickets (买汽车票, 买彩票, 买机票, 行程单, 订酒店, 旅游特惠, 境外游, 快的打车, 小区宝游戏点卡, 阿里游戏, 电影票), Online shopping& Promotion (淘宝网, 天猫宝, 海淘, 全球直购, 返利商家, 促销活动, 一淘比价, 赚集分宝, 红包, 电子券, 快抢), Accounting& E-secretary (账单管家, 交易记录, 支付方式管理, 账户通, 待办事项, 股票行情, 汇率换算), Fiber Security (手机宝令, 数字证书, 支付盾, 短信校验服务, 网页安全控件), Delivery (我要寄快递, 海外转运), Media(官方公众号).</p>

Author-constructed table.

Source of information: ALIPAY.com, ALIPAY wallet.
 支付宝案例分析 (Jiang, X. et al, 2015): <http://www.docin.com/p-1131085159.html>

For Merchants:

For Business customers, at the time of this research there are 34 products, serving more than half a million merchants. As shown in table 2. “ALIPAY Products for merchants”, it offers one-stop guidance for merchants to open online shop, with functions cover receiving online payment (key function), offering big data, online shop setting-up, online shop promoting, accounting management(assistance), and more.

Table 2. ALIPAY Products for merchants

<i>Payment Service</i>	Online payment (担保交易收款, 即时到账收款, 双功能收款 (担保+即时), 网银支付, 货到付款, 平台商担保交易收款); Mobile payment (快捷支付, 即时到账收款, 手机网站支付, 扫码担保交易收款); Large-value Payment , account to account(支付宝站内大额收付款, 批量付款到支付宝).
<i>Partner service</i>	Portals (ShopEx, 360Shop, Hishop, Lodoeshop, phpwind, 万网, 西部数码, 美橙互联, 华夏名网, 天天团购, 万维团购), Tools (一淘, 全球速卖通, 网渠宝, 塞普对账宝, 量子恒道统计, CNZZ 数据专家, 53 快服, 又拍), Data service(数据罗盘), Other Value-added services(集分宝批量自助发, 快捷登录).

Author-constructed table.

Source of information: ALIPAY.com.
 支付宝案例分析 (Jiang, X. et al, 2015): <http://www.docin.com/p-1131085159.html>

Relationship with the Banks:

ALIPAY’s co-operation with banks started from 2010, when it first signed agreement with Bank of China (BOC). And till now, it has developed relationship with 134 banks and other financial institutions, covering all the big State-owned Chinese commercial banks (the Bank of China, the China Construction Bank, the Agricultural Bank of China, and the Industrial and Commercial Bank of China), VISA, and MASTERCARD. Detailed list is available in its official website: <https://ab.ALIPAY.com/i/yinhang.htm> (in Chinese).

2.2 ALIPAY and its profit model

According to ALIBABA’s yearly report, there are four main profit sources of ALIPAY: Service fee, Interest income, Advertisement income and Income from wealth management products.

Service fee:

In general, ALIPAY offers its services free to small users of the platform and makes its revenues on larger users.

Service fee included the technical service fees and the fees charged from the merchants. The applicable Service Fee rate of the first calendar month will be 3.0 % of each Transaction Value. Thereafter, based on the Transaction Value of the preceding calendar month, ALIPAY will charge Merchant Service Fee ranging from 2.0% to 3.0%. (ALIPAY global, 2017)

Interest income:

The payment settlement service offered by ALIPAY (payment via bank cards, online payment, mobile payment, payment via TV, payment by fixed-line telephone, issuance and acceptance of prepaid card) generated huge amount of huge amount of precipitation provisions. According to Xinhua Finance, the amount of clients' provisions of ALIPAY was about CHY 160 billion (EUR 21 billion) in 2016,

The huge amount of precipitation provisions of the third-party payment system growing day by day had caught attention of the market and regulators. Announced by People's Bank of China(PBOC) in Jan. 2017, third party payment platform is required to deposit 20% of the held customer fund to specified general bank accounts starting from Apr. 2017. Although it may not initially be a problem, but in the long run, this may be a motivation for a payment institution to adjust its business structure and find new source of revenues.

Advertisement income:

Advertisement income is the most direct income for ALIPAY, but it takes only a little share of its total revenue. Though multiple types of advertisements are presented, the layout and design of all types of advertisement is clear and highly-targeting, thanks to the big data collected by ALIPAY.

Income from wealth management products:

There are different funds co-operate with ALIPAY's most famous wealth management product "Yu'e Bao(余额宝)", and those funds pay ALIPAY a 0.4-2% of the total fund value. According to the data provided by SUPCHINA (2017), wealth managed by Yu'e Bao has surpassed JPMorgan Chase's U.S. government market fund of \$150 billion to become the world's largest money market fund, reaching a total amount of \$165 billion.

2.3 ALIPAY and its successful factors

Three key factors make ALIPAY a success today: Escrow service, Product collaboration, and Marketing positioning (SME+ individuals).

Escrow service:

Escrow has served as a convenient mechanism for secured transactions for more than 500 years. However, there is no concept of escrow, nor associated rules in China's legal system. For reasons both historical and recent, trust in China is

based on personal relationships. ALIPAY addresses this problem by providing escrow service: (1) All sellers on the e-commerce platform are requested to pass an online certification test to verify their identity information; (2) all transactions are recorded and can be traced back by both sellers and customers; (3) payments are first transferred to ALIPAY and only released to sellers when buyers indicate that they have received their products in good condition.

Products collaboration- shared market base and accumulatively creating value:

Introduced by its mother company ALIBABA Group (NYSE: BABA), the Chinese biggest E-commerce holder, ALIPAY's products line is fully integrated within the TAOBAO, another brand owned by ALIBABA, the largest online shopping platform in China, leveraging its large user base to drive ALIPAY's further growth.

Marketing positioning:

Ever since it started, ALIPAY targets predominantly at small enterprises and individuals. This defines a unique business opportunity which embraces the productive forces of small enterprises and offers more diversified products and services for consumers.

2.4 ALIPAY vs. Traditional Banking

Traditionally, all Chinese banks are supported by government, and this has resulted in a monopolistic banking system. The triple advantages held by the banks were state support, public trust, and monopoly status. As a matter of fact, until 2011, the banks are the only party who has the right to conduct payment transactions and operation of payment cards. But, due to the banks' reluctance to deal with small amount transactions involving distance-selling, considering its high-risks and small-yields, that provide ALIPAY the niche to enter and dominate this market, realizing they are frequently small in unit size but massive in aggregate across the market (Yu & Shen, 2015). After intensely negotiating among the banks, government institutes and other related parties, ALIPAY finally got the government's closing-eyes to enter this market. In practice, ALIPAY has broken the transaction monopoly.

2.4.1 Advantages of ALIPAY/Fintech over traditional Banks:

- 1) Mobility: It enables bank transfers, automatic payments of bills, and purchases with scanning code through a mobile phone;
- 2) Low-cost, more efficiency: It offers peer-to-peer transfer, money exchange, and other service at lower cost than the banks;
- 3) Availability for the public of Wealth management products: Traditional banks targets big clients for their wealth management products, leaving the small clients out of the scope. ALIPAY's wealth management products

have no minimum limit for clients to start their Yu’e Bao account. Collectively, it’s the biggest fund in the world, but individually, individual client can put in and withdraw his/her balance at any time, and in between it is functioning as an investment and proving investment yield.

2.4.2 Potential threat to the traditional banking sector:

Due to the financial industry regulations and the different niche of targeting clients, ALIPAY will NOT become a big threat to the traditional banking area.

But special attention will be needed from the banks in the wealth management area. The small-value collective funds will demonstrate a big competition for banks to attract deposits, as people would choose to deposit it in Yu’e Bao (and other products with similar characters) to get higher yield without losing the flexibility to move the money out and in (to bank account) at any time.

3. The Social-Economic Impact of ALIPAY

3.1 Impact in general economy

It is predicted that 20% of the China’s total retail sales of consumer goods would be from e-commerce channel by 2018 (iResearch, 2017). As can be seen from figure 1 “Rate of e-commerce in the total retail sales of consumer goods”, the internet economy has already become the essential engine of growth of domestic economy. According to data provided by YCharts, ALIBABA Group (NYSE: BABA) alone has reached a market value of \$450.1 billion as of Sep. 2017.

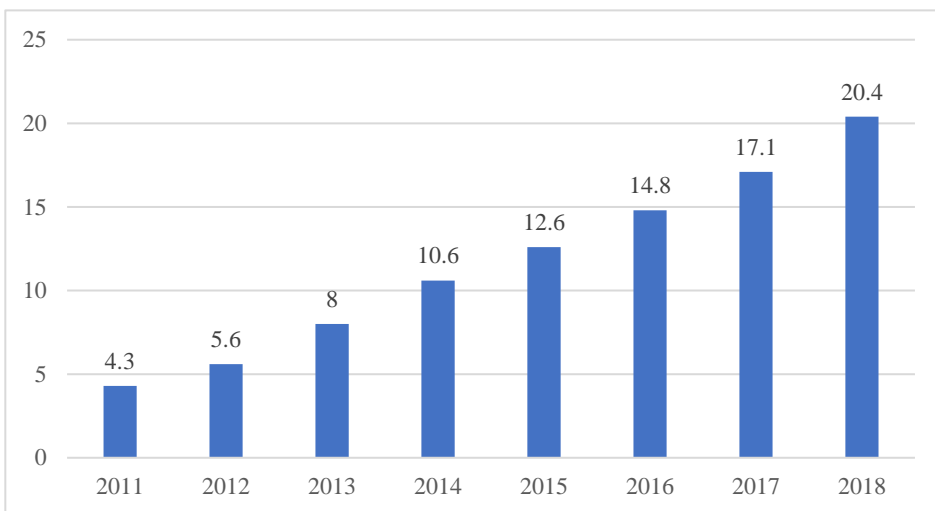


Figure 1. Rate of e-commerce in the total retail sales of consumer goods (%), 2011-2018

Author-constructed table.

Source of data: iResearch Consulting Group, 2017

http://www.iresearchchina.com/Upload/201701/20170124155124_0722.pdf

As the payment solution of ALIBABA, ALIPAY has been acting as the bridge between Chinese individuals and merchants, and it played an important role for ALIBABA's business success. Domestically, ALIPAY bridges the individuals and merchants to boost the growth of ecommerce transaction in terms of payment method; Globally, ALIPAY helped the business relationship between China and other countries through its convenient cross-border overseas currencies settlement service.

3.2 Impact in general society

Driving the Development of Cashless Society:

With the rapid development of third-party online payment, China is gradually developing into a cashless society. In contrast with the developed countries whose cashless payment stays at the bank card stage, China skipped the era of credit card and has entered the era of convenient mobile payment, currently by scanning QR code offline, with the trend of payment through biometric identification.

Improvement customers' daily life management:

As a multi-functional tool, ALIPAY makes numerous contributions to public services across the China by simplifying the payment process. Working with public institutions, ALIPAY enable users to pay for all kinds of utilities fees, taxi rides, movie tickets, education fees, and so more. In addition, ALIPAY cooperates with major hospitals, tourist companies, logistics companies, restaurants, beauty salons, and other service providers for the booking and tickets service. Consequently, by providing a wide variety of public and private services, ALIPAY not only makes great changes the people's daily life, but also pushes the related ecommerce sectors forward.

Pushing the financial industry to improve:

By using ALIPAY's built-in wealth management application (Yu'e Bao), users can make an investment with low threshold. It provides an easy way for individuals especially the low-income to invest and increase their income, and boosts the development of financial service by activating the idle wealth in society and maximizing the investment rate.

Contributing to the development of logistics industry:

As online shopping becomes more and more popular in China, the increasing of orders creates more demands for the logistics industries. To improve the total efficiency, ALIBABA Group (NYSE: BABA) established a China Smart

Logistics Network to create an advanced IT-driven logistics processing ecosystem, which involved with e-commerce business, courier companies, warehouse companies, third-party logistics service providers and supply chain managers. It is expected that the China Smart Logistic Network would effectively drive the innovation and revolution of China Logistics sector, and improve the delivery system and services (Liu, R., 2015).

3.3 Legal Risks of ALIPAY

Cyber-security of the clients' accounts:

As the mobile payment technology growing popular, it has become the lucrative target for hackers. For the mobile payment platform providers and e-commerce companies, poor business practices can lead to administrative threats in the form of password sniffing, data modification, spoofing, and repudiation in e-commerce. If not carefully dealt with, they can lose confidence to their customers and eventually get out of market. To avoid it, the third-party payment platform must make sure that an Information Security Management System (ISMS) is established to maximally secure the clients' account and payment channel (Zhen, C., 2010).

Risk of financial crime, including money laundering and circumvention of international sanctions:

Undisclosed third party payment arrangements can be used to disguise the identity of the true payer and true source of funds, that's why they can be used to conduct money laundry or avoid sanctions.

In China, until recently, information about capital flow was tightly guarded by third-party payment companies and bypassed the regulator. On Aug. 4, 2017, the People's Bank of China (PBOC) mandated that mobile payment groups must channel payments through a new centralizing clearing house by June of 2018, aiming at placing the non-banking transactions under supervision to avoid potential money laundering and other illegal practices.

Violation of Customers' right:

According to ALIPAY'S user agreement, that "ALIPAY is not responsible for any indirect loss, punishable compensation or special loss of its users, even when such loss can be predicted; any guarantee or information service provided by its employees, no matter if the guarantees or services are oral or written shall not constitute a guarantee of the company's services; under any circumstances, the company's compensation shall not exceed the fees the company charges for that certain service; the company has the right to stop the service agreement whenever it wants to without making any compensation to its customers"

(ALIPAY, 2017). All these provisions are obviously in violation of legal regulations.

4. Implications of ALIPAY in Latvian market

4.1 Fintech industry development in Latvia

In Latvia, financial market is traditionally dominated by banks, cards and cash. Today, non-bank payment companies hold only a tiny share of Latvia’s payment industry and cash is still used for most of the instore transactions.

But, this situation is about to change. According to the recent report from LIAA (Latvian Investment and Development Agency), nearly 25% of FDI into Latvia relates to the financial services and insurance sectors; more than 20 local credit institutions and foreign bank branches already operate in Riga; large Nordic banking groups like SEB and DNB and the Big Four accounting firms are also present; promoting financial services and Fintech are recent activities for LIAA.

4.1.1 Statistics of Fintech industry in Latvia:

1) List of Fintech firms based in Latvia

Latvia is a growing center for Fintech, particularly in alternative loans, digital payments and accounting. Table 3. “Fintech firms based in Latvia, and its main code of business” shows a list of Fintech firms based in Latvia (as till Mar. 2017):

Table 3. Fintech firms based in Latvia, and its main code of business

<i>Company</i>	<i>Code of Business</i>
<i>4 Finance</i>	One of Europe’s largest online and mobile consumer lending groups. Since 2008 have lent over EUR 3bn.
<i>Alfa Finance</i>	Digital consumer finance and P2P lender active in Latvia, Georgia, Poland and Asia.
<i>Alpari</i>	Global FX broker with back office in Riga.
<i>Altero</i>	Loan comparison tool for consumer credit and car leasing. Plans to expand to real estate segment and new countries.
<i>Bitfury</i>	Blockchain specialists supporting transaction processing, property rights registry, analytics and Platform-as-a-Service.
<i>Conifide</i>	Payment specialists offering eWallets, invoicing and payment solutions for SME’s and a full-service offer for Merchants.
<i>Cream Finance</i>	Digital consumer finance firm active across Europe.
<i>Credium</i>	Digital consumer finance firm active in Georgia.
<i>DECTA</i>	Payment processing and card issuing solutions for Banks, Corporates, P2P and other payment service providers.
<i>Dukascopy</i>	Global FX, Banking and Investment

<i>EcomCharge</i>	Developer, supplier and system integrator for payment service providers and e-commerce.
<i>Ecommpay</i>	Payments specialist offering acquiring and settlement services for e-commerce, e-wallets, cards, mobile payments, etc. h
<i>Escrown</i>	Online Escrow service including secure funds deposit, payments and post settlement warranty.
<i>Factury</i>	Blockchain solution supporting secondary market trading of bank loans, smart invoice payment and settlement, etc.
<i>Finabay</i>	Digital consumer finance firm active across Europe. Investor in Twino.
<i>Funderful</i>	Online P2P fundraising for academic institutions.
<i>Grandma</i>	Online financial management solution offering alternative to Excel for management of corporate and project finances.
<i>Ibanpay</i>	B2B and B2C e-wallet, e-payments processing and reconciliation solution provider.
<i>Inbudget</i>	Personal financial management application including budget planning, spend analytics and social syncing.
<i>Mintos</i>	P2P marketplace where investors can invest in personal and corporate loans, primary and secondary markets.
<i>Mogo</i>	Digital car finance firm active in the Baltics and Georgia, with Poland and other markets planned.
<i>Monea</i>	Send or receive payments within minutes using phone book contacts.
<i>Nomo</i>	Digital consumer good leasing provider offering flexible payment and ownership options.
<i>Nordcard</i>	Credit and payment card provider.
<i>Nordigen</i>	Help lenders accelerate client applications by automating back statement screening, data categorisation and analysis.
<i>Notakey</i>	Data security solution that allows remote authorisation of sensitive operations such as log-in, approval and payments.
<i>Payment Ninja</i>	Processes payments and helps merchants sell more by analysing client profiles using Big Data and re-marketing.
<i>RiddleSense</i>	Big Data analytics to improve client analysis and predictions.
<i>Rietumu Bank</i>	In addition to traditional banking, Rietumu also invest in FinTech's and run the Rietumu Fintech Challenge.
<i>Solut</i>	Digital bank specialising in SME lending, with applications turned around in under 5hrs.
<i>Streampay</i>	IPSP offering payment solutions for e-commerce including card personalisation, acquiring and processing.
<i>Swipe</i>	Corporate financial management including invoicing, recurring payments and customised payments.

<i>Twino</i>	P2P marketplace where investors can invest in consumer loans. Buyback guarantee on delinquent loans.
<i>UX Design Agency</i>	Design agency delivering user experience solutions for online financial services.
<i>Zen FinTech</i>	Analytics, market monitoring, auto investing and marketplace integration for investors and P2P operators.
<i>viainvest</i>	P2P marketplace active in Latvia, Czech and Spain. Loans originated by parent Via SMS Group with buyback guarantee.
<i>Via SMS Group</i>	Digital consumer finance firm active in Latvia, Lithuania, Czech, Poland, Spain and Sweden.
<i>Viventor</i>	P2P marketplace offering investment in consumer loans and real estate mortgages with buyback guarantee.
<i>Wandoo</i>	Digital consumer finance firm active in Georgia.
<i>Weststein Cards</i>	Card solutions including corporate travel, pre-paid cards for the underbanked, etc.

Source of table: KeyCapital, 2017.

<http://www.keycapital.eu/fintech-in-latvia/4592402648>

2) General statistics of Fintech industry in Latvia:

Source of information: Statista

(<https://www.statista.com/outlook/295/142/fintech/latvia#>)

- a) Transaction Value in the Fintech market (Latvia) amounts to US\$ 878 m in 2017.
- b) Transaction Value is expected to show an annual growth rate (2017-2021) of 22.8 % resulting in the total amount of US\$ 1,999 m in 2021.
- c) The market's largest segment is the segment "Digital Payments" with a total transaction value of US\$ 816 m in 2017.

4.1.2 Comparative advantage of Latvia in the Fintech sector

1) High Internet penetration rate and fast internet speed:

Among OECD countries, Latvia has the 3rd highest percentage of fiber connections in broadband subscriptions: 59.7% compared to the OECD average of 17.9%; Latvia's broadband rate is 25Mbps with average internet speeds of 16Mbps. (LIAA, 2016)

2) Low cost of qualified IT talents:

Not only are Latvian IT employees cheaper to hire, they also tend to be well-versed in English. According to LIAA, 57% of Latvian in the 25-34 years old age group know at least 2 foreign languages; as for the labor cost, the average salary for a PHP developer in Latvia is 1,155 EUR/m, comparing to 4,900 EUR/m in

Sweden for an entry level developer, and 7,500 USD/m (6,262 EUR/m) in the USA (LABS OF LATVIA, 2017).

3) Strong international presence:

Being part of the European Union and the Eurozone, Latvia offers the investors best benefits and more: access to the EU market, the talent, and the structural funds; free movements of goods and personnel; shared banking system and mobile zone. According to the Index of Economic Freedom 2017, Latvia is among the world's top 20 freest economies.

4) Government policy support:

Startups in Latvia enjoy tax reductions and co-financing for R&D. According to the LIAA report (2017) "Latvia- the next great investment destination" (<http://www.liaa.gov.lv/en/invest-latvia>):

- a) Tax arrangement: Latvia has the lowest total tax rate for business in the Baltic States (Source: Paying Taxes Report, the World Bank Group and PwC, 2017); Latvia ranks the 3rd for tax competitiveness among OECD member states.
- b) Support for start-ups: Latvia is the first country in the Baltic States adopting a special law for start-ups and has the fastest emerging start-up ecosystem and the 3rd largest Fintech cluster in Europe. Latvia special tax regime for start-ups: flat-all-inclusive social tax is EUR 259 per employee plus 10% private pension fund contribution.
- c) Funds for innovation: Available support for innovation development: EUR 195.5 million.

4.2 Comparison of the Fintech environment factors in Latvia and in China

As analyzed above, third payment online payment can play a significant role in improving a country's general economy, people's daily life, financial and logistics industry's development. In this part of the paper we will use comparison analysis to find out whether the successful practices by ALIPAY can be implanted in Latvian market.

4.2.1 Market size:

1) Comparison analysis:

As can be seen from table 4. "Comparison analysis of Fintech industry market in Latvia and China", considering key indicators for the potential Fintech market size (the total consumption of goods, internet and mobile penetration, and mobile payment transaction value), market size in China is significantly bigger than in Latvia.

Table 4. Comparison analysis of Fintech industry market in Latvia and China

	<i>Latvia</i>	<i>China</i>
<i>Total consumption</i>	Total Consumption (2010): LATS 4.9 billion (EUR 6.7 billion)	Total Consumption (2010): CHY 13,150.4 billion (EUR 1,669.4 billion)
<i>Internet and mobile penetration</i>	In 2016: Internet user: 1.37 million; Smart phone user: 0.81 million.	In 2016: Internet user: 710 million; Smart phone user: 656 million.
<i>Mobile payment transaction value</i>	In 2017: US\$ 9 million	In 2017: US\$ 138,272 million

Author-constructed table.

Source of data:

World bank (2017): <http://datatopics.worldbank.org/consumption/>

Statista (2017): <https://www.statista.com/outlook/331/117/mobile-payments>

2) Indication for the Latvian market:

- Data above shows that it's hard for any local brands to grow into a market gaint like in ALIPAY's case, and good strategy for the government is to focus more on start-ups, offering policy support and reduce its potential liabilities; As analyzed above, that Latvian government, especially the ministry of Economics and LIAA, has put their main effort in promoting the start-ups and SMEs, the analysis from this research paper concludes that's the correct policy direction; But from the other perspective, that sub-products from bigger companies can create a collaboration effect, as in ALIPAY's case, different platforms(TAOBAO and ALIPAY, for example) used the joint customer base and successfully pushed each other to a further success. So here we can cautiously suggest that the government give more support to the already-grown IT companies in Latvia, instead of rushing into their minor issues (for example the case of ss.lv), to assist them to grow to a higher level.
- And lesson for the local business owners who would like to join the Fintech market is that they need to find a business niche, and focus on narrow but deeper line of products, and to target European Union as the potential market instead of only Latvia, this demands their initial market research to be within a broader geographic area, and add other European language available (English, for example);
- As for researchers, more researched needed to be done for the most suitable business model for local Fintech companies to go global.

4.2.2 Cultural difference:

1) Comparison analysis:

As discussed in the previous part of this research paper, and concluded in table 6 “Key culture differences for Latvian and Chinese Fintech market”, that several key points of ALIPAY’s success are not presented in Latvia.

Table 5. Key culture differences of Latvian and Chinese Fintech market

	<i>Latvia</i>	<i>China</i>
<i>Trust in Business</i>	Normal	Low
<i>Openness to a cashless society</i>	Weak	Strong
<i>Policy/Regulations in Financial sectors</i>	Strictly regulated under European Law	Loosely regulated, gradually tightening and adjusting to the updated situation.

Author-constructed table (2017).

2) Indication for the Latvian market:

The low-trust in Chinese business sector and strong openness to a cashless society created the unique opportunity for ALIPAY to strike. Thus, when it launched the market, the key selling points are their escrow service and their convenient way of paying. For the entrepreneur in Latvia, a good lesson is also to identify the needs of the market, and the gap in between the customers’ expectation with reality, to make their products filling that gap. As shown above (table 3 “Fintech firms based in Latvia, and its main code of business”), that Latvian business owners identified the biggest market needs currently in Latvian market, small loans, currency exchange and cross-border transfer. This research confirms that the main direction of the current Fintech market in Latvia is correct.

And as for the policy and regulations in Financial Sectors, Latvia follows the latest European law to minimize the risks that Chinese Fintech industry bring to its market (risks of financial crimes and violation of customers’ rights, as analyzed above as the key legal risks ALIPAY). But, the risk of Cyber-security is still an existing problem needs attention from the government and the business runner. As bigger IT companies usually has better resources for the construction of the IT security provisions, government should show more support for its development.

5. Conclusion

Main research findings of Research:

- ALIPAY has integrated into the everyday life of its consumers and offers a complete customer experience with a wide spread products package;
- ALIPAY has big positive impacts in the general economy and social sectors;
- There are legal risks underneath ALIPAY's business model and operations;
- ALIPAY's success factors lies on three main factors: 1) the huge client base provided by ALIBABA group when ALIPAY was initially launched; 2) the distrust in Chinese business sector and the absence of an effective escrow system to protect customers' interest; and 3) ALIPAY's correct market positioning strategy: targeting SMEs and individual clients.
- The business environment in Latvia and China is significantly different.

Conclusions of this research:

ALIPAY's success shows that a good Fintech product has the potential to boost the development of a country's economy and to contribute to functioning of society in general. As for Latvia, the financial sector is a key to modern Latvia's development strategy. The Fintech sector should be highly promoted.

However, the analysis of legal risks of ALIPAY shows the insufficiencies of the current legislation, which leaves potential risks for the protection of user' information and space for customers right to be compromised, ALIPAY's user agreement is an example. And the advantage of Fintech's efficiency also leads to its vulnerability, it can be used as a channel for financial crimes such as money laundry, thus government needs to be aware and evaluate all gains and risks when supporting its development taking into account new findings and new approaches expanding in fast developing countries. In the case of Latvia, the government cautiously follow the regulations and laws of the European Union, which helps to minimize those risks, at the other points, it slowed down the Fintech market's fast growing.

What's more, the comparison analysis of the business environment in Latvia and China shows significant differences, especially in the customer base and their main concerns. Thus, the same business model of ALIPAY cannot work in Latvian market. Useful lessons can be learned from ALIPAY's success in Latvian market: 1) For government, policy support and market guidance are highly needed as most of the Fintech companies in Latvia are start-ups and very vulnerable; Existing IT companies who already have good client bases should be supported to expand their business area, through special taxing arrangements or offering financial operational licenses; 2) For companies, business owners should

carefully positioning itself in the market niche; and use Europe as the targeting market instead of focus only on inner Latvia.

References

Cao, Y., Chau, P., Lu, Y., & Yang, S. (2011). Dynamics between the trust transfer process and intention to use mobile payment services: A cross-environment perspective. *Information & Management*, 48, 393–403. DOI:10.1016/j.im.2011.09.006

Cao, Y., Gupta, S., Lu, Y., Yang, S. & Zhang, R. (2012). Mobile payment services adoption across time: An empirical study of the effects of behavioral beliefs, social influences, and personal traits. *Computers in Human Behavior*, 28, 129–142. DOI: 10.1016/j.chb.2011.08.019

Chen, J., Chen, T., Tao, J., & Wang, H. (2015). Big data based fraud risk management at Alibaba. *The Journal of Finance and Data Science*, 1, 1-10. DOI: <http://dx.doi.org/10.1016/j.jfds.2015.03.001>

Cheng, P. & Zhen, C (2010). Analysis the development and security policy of third-party online payment platform, *Computer Science and Information Technology*, 3, 43-47. DOI: 10.1109/ICCSIT.2010.5564793

Cui, Y., Jiao, H. & Jiao, J. (2016). Technological innovation in Brazil, Russia, India, China, and South Africa (BRICS): An organizational ecology perspective. *Technological Forecasting & Social Change*, 107, 28–36. DOI: <http://dx.doi.org/10.1016/j.techfore.2016.02.001>

Du, J., Li, H., Li, J., Lu, J. & Wu, D. (2013). User acceptance of software as a service: Evidence from customers of China's leading e-commerce company, Alibaba. *The Journal of Systems and Software*, 86, 2034–2044. DOI: <http://dx.doi.org/10.1016/j.jss.2013.03.012>

IREsearch Global Group (2017). 2017 China's Third-party Online Payment Market Report, retrieved from http://www.iresearchchina.com/content/details8_34116.html

Jiang, X., Lin, T., Wang, Z., & Zhang, X. (2015). “支付宝案例分析” (in Chinese), retrieved from <http://www.docin.com/p-1131085159.html>

Leong, C., Sun, Y., Tan, B., Tan, F. & Xiao, X. (2017). Nurturing a FinTech ecosystem: The case of a youth microloan startup in China. *International Journal of Information Management*, 37, 92–97. DOI: <http://dx.doi.org/10.1016/j.ijinfomgt.2016.11.006>^[17]_[SEP]

Liu, R. (2015). *The Role of Alipay in China*, Radboud University, Neimegen, 63 p. retrieved from www.ru.nl/publish/pages/769526/z01_rongbing_liu.pdf

Liu, Y. (2015). Consumer protection in mobile payments in China: A critical analysis of Alipay's service agreement. *Computer Law & Security Review*, 31(5), 679–688. DOI: <http://dx.doi.org/10.1016/j.clsr.2015.05.009>^[17]_[SEP]

PwC (2017). *Global Fintech Survey China Summary*, retrieved from <https://www.pwccn.com/en/financial-services/publications/fintech/global-fintech-survey-china-summary-jun2017.pdf>

Shen, W. (2012). Deconstructing the myth of Alipay Drama—Repoliticizing foreign investment in the telecommunications sector in China. *Telecommunications Policy*, 36, 929–942. DOI: <http://dx.doi.org/10.1016/j.telpol.2012.08.008>

Shim, Y. & Shin, D. (2015). Analyzing China's Fintech Industry from the Perspective of Actor–Network Theory. *Telecommunications Policy*, 40, 168–181. DOI: <http://dx.doi.org/10.1016/j.telpol.2015.11.005>

Statistica (2017). *Internet and mobile penetration rate*, [statistics]. Retrieved from Statistica database.

Wang, X. (2012). Foreign direct investment and innovation in China's e-commerce sector. *Journal of Asian Economics*, 23, 288–301. DOI: [10.1016/j.asieco.2010.11.007](http://dx.doi.org/10.1016/j.asieco.2010.11.007)

World Bank (2017). *Statistics data of country consumption*, [statistics]. Retrieved from World Bank database.

Xia, J. (2016). Convergence and liberalization in China's ICT sector: New market and new ecosystem. *Telecommunications Policy*, 40, 81–88. DOI: <http://dx.doi.org/10.1016/j.telpol.2015.12.002>

Yu, Y., & Shen, M. (2015). Alibaba and the Threat to China's Banking Sector, retrieved from <http://www.fljs.org/sites/www.fljs.org/files/publications/Alibaba%20and%20the%20Threat%20to%20China%27s%20Banking%20Sector.pdf>