FINTECH ~ LIBERATION OR LIABILITY

Whitepaper

1.1 Market Introduction

1.1.1 What is Fintech?

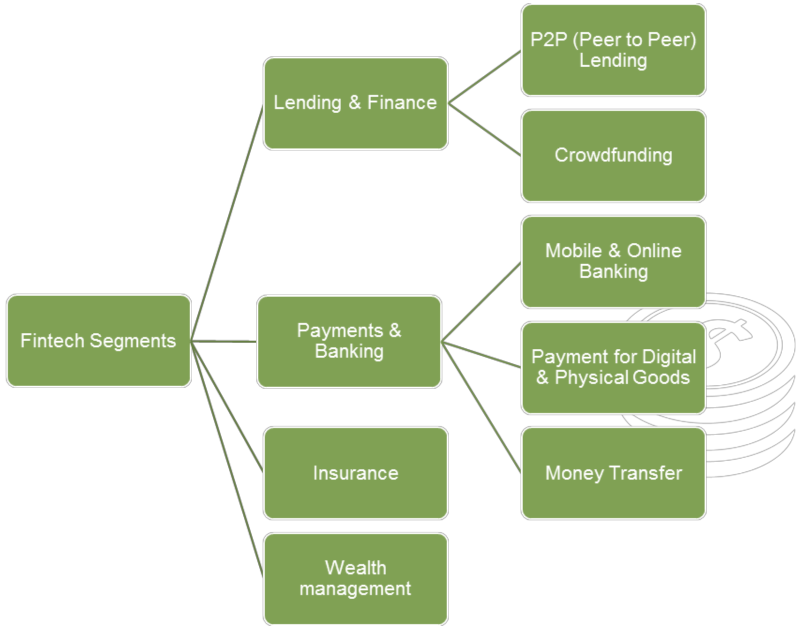
Juniper defines fintech as the use of technology to underpin delivery of financial services (bank accounts, payments, insurance products, financial planning and trades). This research covers both B2C (business to consumer) and B2B (business to business) application across the below sectors:

- Banking (current, business and savings accounts, overdrafts, loans)
- Payments (payment processors, payment cards and billing)
- Money transfers and remittance
- Lending (underwriting loans and providing lending platforms)
- Equity financing
- Insurance (supporting underwriting and claims processing)
- Wealth Management (helping individuals manage their money)

There are numerous factors driving the adoption of fintech products. In the developing world, suppliers are looking at ways to provide services to individuals who previously have never used financial services (often referred to as 'unbanked').

As mobile phones penetrate rural areas suppliers are helping people obtain credit and store their income.

Figure 1: Fintech Market Segmentation



Source: Juniper Research

Furthermore economic growth fuelled by a young and educated population and a growing middle class overall has fuelled a desire to replicate lifestyles in the developed world.

Rising income levels have driven demand for insurance and wealth management products, plus lending levels are expected to rise rapidly because lenders have more datapoints to evaluate as individuals increasingly use cards and mobile payment platforms.

The drivers of fintech adoption in the developed world are different to those of the developing world. The last financial crisis resulted in a mistrust of FIs (financial institutions) this, coupled with a perception that the financial behemoths provide a poor service, has fuelled consumers' appetite for products and services from new providers.

Many products utilise cutting-edge technologies such as data analytics, machine learning and automation to provide services that are more tailored to the individual and delivered in a timelier manner. These developments have not escaped the attention of VC (venture capital) firms who have been investing heavily in fintech companies.

VC investments reached $13.8 billion in 2015, up by 106% year-on-year.

Furthermore the large technology firms are offering financial products in the form of digital wallets (Apple, Google, Samsung, and Tencent etc), working capital to suppliers in their ecosystem (Amazon) or helping to provide advertisers with ways to convert consumer interest into purchases (Facebook). All in all, the traditional ways of providing financial services are set to change forever.

1.1.2 Finance Products Are Built On Trust

Financial products are built on trust, so there needs to be transparency between the customer and provider. However trust can easily be undermined.

In June 2016, at least 400 customers at Germany's challenger bank, N26, had their accounts terminated without warning. N26 enables customers to make cash withdrawals at ATMs, but the bank incurs a fee each time such a transaction takes place. Customers with unusually frequent withdrawals from ATMs therefore had their accounts terminated.

As the fintech market evolves consumer protections will become paramount. After mishaps by rogue lending providers, the Chinese government is strengthening its consumer protection laws. The new regulations tie in with the Chinese government's desire for its economy to move away from the manufacture of clothing and establish a reputation for providing modern technologies and solutions. The Five Year Plan for 2016-2020 prioritises regulating and promoting innovation in the world of finance.

Regulators are reinforcing consumers' trust in FIs regarding their processes for data privacy, verifying customers (often referred to as KYC [know your customer]) and the provision and enforcement of electronic contracts. As transactions are conducted via smartphones safeguards need to be in place to enforce them

Some countries have tight laws surrounding data privacy; the Canadian authorities stipulate that even publicly available personal information is subject to Canadian privacy laws. For fintech providers this means that publicly available personal information cannot be collected and used without the consent of the person or subject.

Banks are ramping up their security protocols. In future, longwinded passwords and pin numbers will be replaced by biometrics (fingerprint, iris, voice recognition, palm, vein, heartbeat). Biometric ATMs have already been introduced in the UK, Brazil, China, Portugal and Japan.

Millennials will also be a factor the financial industry. Many surveys and research studies indicate that this cohort have little loyalty to financial providers, but look for services that offer convenience, speed coupled with a highly personalised customer experience, all based on a mobile app.

1.1.3 Impact on Various Financial Sectors

The financial services market is ripe for disruption. The behemoths are hindered by the need to retain physical branches, the complexity of their internal IT systems (requiring billions of dollars to be spent on maintenance which leaves insufficient funds for more innovative projects) and often their revenue streams hinge on the performance of an expensive salesforce.

The days of banks and insurance companies being all things to all people are numbered. By not having the traditionalists' overheads and using analytics and machine learning, the new breed of fintech suppliers are able to offer products that are more tailored to the individual at prices that undercut the traditionalists.

The challengers typically further differentiate themselves by offering a better customer experience via a well-designed mobile app backed up, if necessary, with excellent customer service.

Table 2: The Fintech Effect

Financial service	Disruption from Fintech	Impact
Banking	Consumers no longer need to visit a bank branch. They can have all their banking needs catered for via a single mobile app.	**Medium:** Most consumers are staying loyal to their existing provider for now.
Lending	P2P (Peer to Peer) lending has enabled individuals who do not fit banks' criteria to obtain credit.	**High:** Fintech firms offer a compelling alternative to traditional providers
Financing	Equity crowdfunding has meant that more individuals can invest in start-ups and has expanded the potential sources of finance for the firms.	**Medium:** Compelling alternative from start-ups but more established firms are likely to value their relationships with 'their bank'.
Wealth Management	Wealth management is no longer the preserve of the super wealthy. Firms are supplying products to enable the middle classes to gain access to a wider range of products and services.	**High:** Traditional providers will struggle to justify their fees. The newly affluent are likely to favour a tech-based approach.
Insurance	Consumers are now able to buy insurance products tailored to their circumstances and the challengers are able to process their claims quicker than the traditional providers.	**High:** Traditional providers cannot match the speed of service and personalisation offered by the new breed of suppliers.

Source: Juniper Research

2 Segment Focus & Forecast Summary: Lending & Financing

1.1.4 The Opportunities for Fintech Firms

As banks have become more cautious with regard to consumer and SME lending they have, in turn, provided opportunities for fintech providers to offer niche services. The new suppliers offer clients the convenience of making an application via a smartphone or tablet and getting a quick decision, thanks to algorithms assessing the risk of default risk.

P2P provides an alternative to a bank loan. P2P lenders provide a matchmaking service offering a marketplace for individuals and businesses to obtain credit and lenders new avenues for getting a return on investment. Lending Club is a high profile marketplace offering credit and loans while LendInvest concentrates on connecting property owners, landlords and/or property developers with new funding streams. There are also solutions for individuals looking to fund a civic project. Spacehive advertises project ideas and funnels donations to them.

Crowdfunding provides an alternative to a small business loan. Equity crowdfunding firms are helping start-ups and firms looking for funding to support their expansion plans. Syndicate Room provides opportunities for HNWIs (high net worth individuals) to invest in start-ups. The company screens opportunities that are brought to them by a firm's lead investor and provides a marketplace for HNWIs to invest in them

CircleUp in the US is similar to Syndicate Room. The company is also a provider of equity crowdfunding, but concentrates on consumer goods companies based in the US. Companies approach CircleUp when they want to scale up from a business with revenues of around $5 million. CircleUp's analytical tools screen applications quickly and can incorporate a wider range of inputs than those of providers more reliant on the work of individual analysts.

Another avenue for funds is the large eCommerce providers. Alibaba offers loans to small businesses, Japan's Rakuten offers working capital loans of up to $80,000 to its merchants, while Amazon utilises its algorithms to offer applicable merchants loans of up to $600,000.

In the B2C market, LendUp helps individuals improve their credit score by restricting the amount initially loaned to them to $250, helping them to develop a track record for repayments and provide advice on financial literacy.

A start-up that targets 'HENRYs' (High Earners Not Rich Yet), SoFi, was launched in 2011 and focuses on helping graduates from top US universities to refinance their student loans at low interest rates. In addition to restricting its services to this segment of society, the company believes that by analysing payment history, education and CV it will reduce its rate of defaults.

In 2015, SoftBank Group led a $1 billion investment round which valued SoFi at $4 billion. However, Sofi is attempting to be more than a lender, by offering customers networking events and coaching sessions.

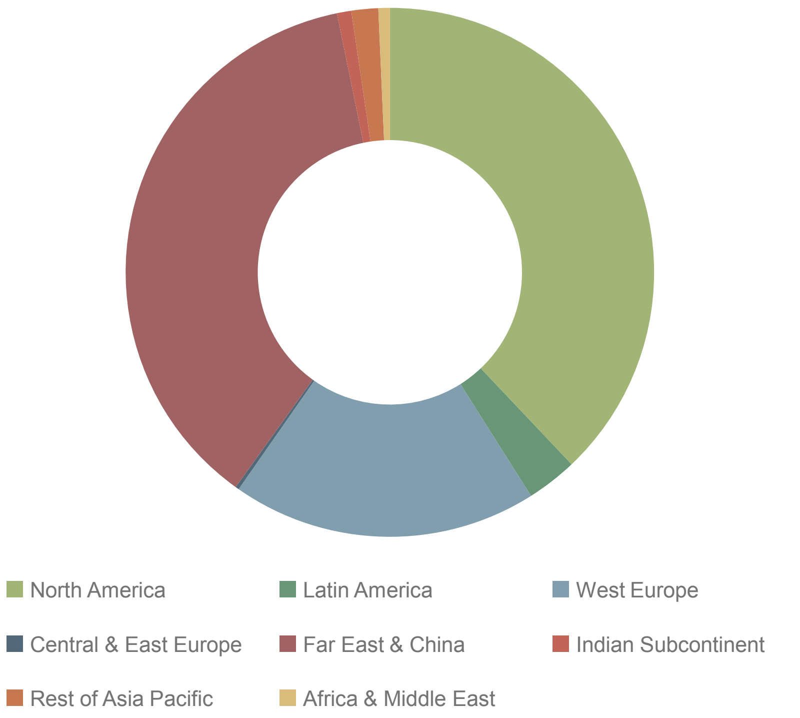
1.1.5 Market Forecast Summary

Juniper Research forecasts that fintech platform revenues to support lending and financing are set to reach $10.5 billion globally by 2020, doubling the $5.2 billion expected this year.

The growth would be driven by a combination of factors including:

- an acceleration in P2P lending;
- crowdfunding becoming a viable alternative to traditional lending mechanisms;
- the deployment of next generation analytics platforms.

Figure 3: Global Lending & Financial Fintech Platform Revenues ($m) Split by 8 Key Regions in 2020: $10.5 Billion



Source: Juniper Research