

An aerial photograph of the New York City skyline at sunset. The sky is filled with soft, orange and blue clouds. The city's skyscrapers are silhouetted against the bright horizon. The Empire State Building is prominent in the center. The image is partially covered by a semi-transparent blue and white geometric overlay.

MATCH-MAKER VENTURES

**Mission impossible:
Making sense of the
FinTech space**

November 2016

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Foreword

About Match-Maker Ventures

We accelerate innovation by fundamentally changing the way corporates and startups work together. We drive the match-making process from the beginning to end and are measured against actual impact created. Our unique network approach enables startups to scale fast while we connect them to the global market.

FinTech – the term that has been in use for just a few decades. Even though, the terminology is little over 30 years old, FinTech history goes back to as far as 1865, when Giovanni Caselli invented the pantelegraph (see illustration), which was used to verify signatures on banking transactions. Current day FinTech kick-off is most commonly marked with the Diners Club's introduction of modern-era credit cards in 1950. Over the past two decades the speed of innovation in FinTech has picked up exponentially, resulting in a labyrinthine landscape that has no clear paths. To highlight just a few examples, the space ranges from contactless payments to robo advisory, blockchain technology and automated risk assessment.



Trying to place this labyrinth into any simple graph or heat map does no fair justice to the FinTech universe. Yet many are trying, and so did we. After studying dozens of research reports, analyzing in detail the business models of roughly 600 FinTech startups and applying our industry expertise we drew our simplified conclusions of the developments in financial industry and of the complex FinTech world.

Enjoy digging into our findings!



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Findings in Brief

38%

World's
unbanked
population

+160m

Small and micro
businesses
without access to
finance

=

Large
playground
for FinTech
incumbents

4

Pain points faced by financial
industry:

- poor customer experience
- limited product offering
- high fees
- outdated infrastructure

4

Innovation enablers to disrupt
the industry and to address
the pain points:

- front-end technology
- back-end technology
- marketplace
- big data & machine learning

35%

Share of startups that disrupt
the industry with front-end
technology, which is the most
popular innovation enabler

37% vs 12%

Share of European commercial
banking revenues (37%) and profits
(12%) from the global commercial
banking revenues and profits

\$22bn

Global FinTech
investments in
2015

3x

InsuTech investments
quadrupled from
\$0.9bn in 2014 to
\$2.6bn in 2015

FINANCIAL INDUSTRY STRUGGLES WITH FOUR MAJOR ACHES

Banking and insurance ROE are still under water

Banking and insurance ROE's stand still in single digits at 8-9% in comparison to pre-crises level of 15%

Asia swallows sector profits and Europe struggles for survival

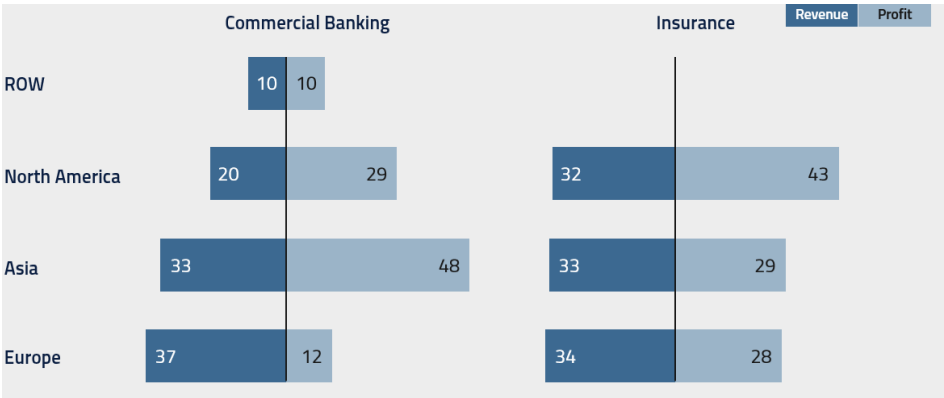
With 33% share of the global commercial banking revenues, Asia swallows roughly half of the global profit pool. Europe, on the other hand, comprises 37% of revenues and only 12% of the profits

The global financial crises of 2007/8 caused ROE collapse across the board for all industries. While most of the industries have recovered to their pre-crises ROE levels, insurance and commercial banking have still a long way to go. Prior to the crises insurance and banking enjoyed ROE levels of around 15%, now this number stands still in single digits at 8-9%.

The same two areas, commercial banking and insurance, constitute majority of the global financial industry. Cumulatively they comprise 90% of the global sector revenues and 94% of the profits.

In 2015, commercial banking alone reaped most of the financial sector profits (71%). Significant portion of these profits originated from Asia, which is the true star in commercial banking - with 33% share of the revenues it harvested 48% of the global profit pool. Europe, on the other hand, is facing a real struggle, while it comprises 37% of the revenues, it collected only 12% of the global profits.

In the insurance industry, regional breakdown is much more equal. Insurance business is most profitable in North America, where 43% of the global insurance profits originate. Nevertheless, Asia and Europe are not far behind and on the overall picture, the revenues and profits are fairly equally distributed between the three continents.







Consumers are at unrest with banking services

Out of the 17m US unbanked adult population, 64% are unbanked out of free choice because they are unsatisfied with the services or consider fees unfair

Even thou, financial industry enjoys nice revenue and profit pools, there is still large untapped region. 38% of adult population globally is unbanked and 160 million micro and small businesses lack access to finance. This leaves notable playground for FinTech incumbents. In US alone, 1 in 13 households is unbanked, which encompasses approximately 17 million adults. Out of these 17 million adults only 36% are unbanked due to lack of money.

Remaining 64% are unbanked out of free choice, of which the main reasons include not liking the banks or the customer experience, considering the fees too high or product offerings insufficient. The same reasons drive FinTech adoption rates across the globe putting the industry face-to-face with four key pain points.

FINANCIAL INDUSTRY PAIN POINTS

 POOR CUSTOMER EXPERIENCE	<ul style="list-style-type: none"> Customer journeys are too long, lack intuitiveness and are not coherent across diverse channels Product access across diverse channels is limited
 LIMITED PRODUCT OFFERING	<ul style="list-style-type: none"> Poor personalization leading to outcome, whereby customers are pushed into pre-defined grids and in case of no-fit they are rejected Low interest environment limits the product offerings
 HIGH FEES	<ul style="list-style-type: none"> Complex back-office processes increase costs that are passed on to customers Long historically developed value chains with high number of intermediaries who all want their share of the pie
 OUTDATED INFRASTRUCTURE	<ul style="list-style-type: none"> Core platforms that were built pre-curent era FinTech offer limited compatibility with emerging technologies, limited capatilities for regulatory compliance as well as poor satisfaction of customer needs

Source: Match-Maker Ventures analysis

COLLABORATION – MAGIC PILL TO RELIEVE THE ACHEs

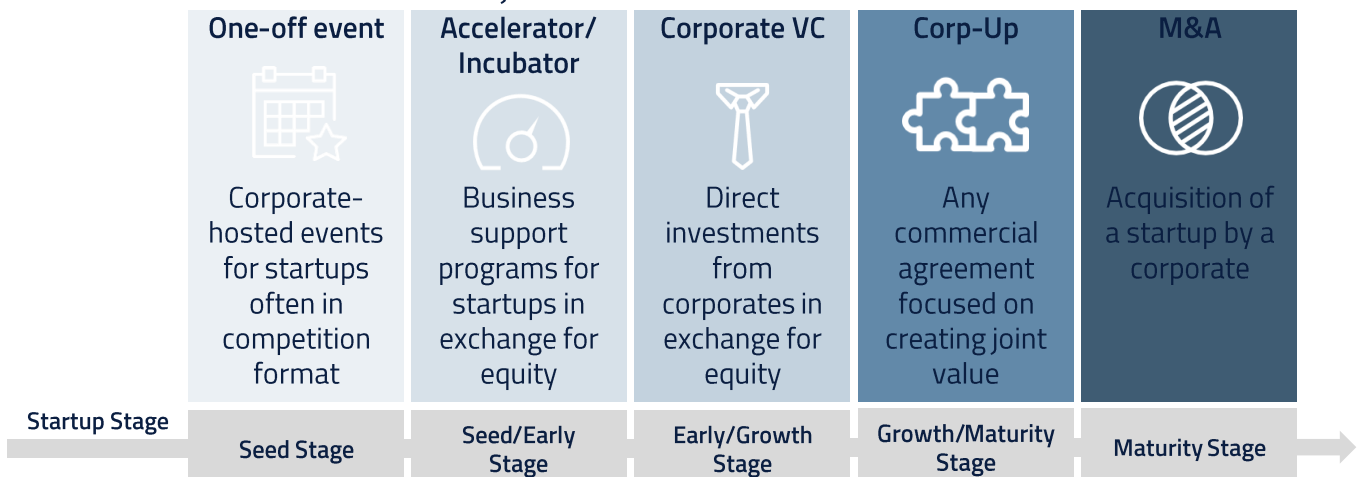
Collaboration experience is notable

79% of corporates and 77% of startups have already collaborated

Irrespective of the industry, corporates are finding their way toward startups. Our recent study on corporate startup collaboration depicted that 79% of corporates have already collaborated with startups and 85% of the ones who haven't are interested to do so. The same picture echoes from the startup world, whereby 77% have already collaborated and 85% of the ones who haven't desire to do so.

Financial industry is no exception in the case. Industry players are actively reaching out to startups and vice versa. The two need each other to survive. Startups feed corporates appetite toward innovation, while corporates provide startups the customer based and chance for speedy scalability. Neither can get the desired results without collaboration, because corporate culture allows only for limited internal innovation and startups lack sufficient financing to scale quickly.

Five major vehicles are used for collaboration





Wise financial industry players have recognized the power of collaboration and are already enjoying the fruits from the collaborative synergies.



Accelerator/ Incubator

Barclays launched an accelerator in 2013. Current locations are in New York, London, Tel Aviv and Cape Town, with each hosting 10 startups annually

Wells Fargo launched a six months acceleration program in 2014. It offers funding of \$500k in return for a minority equity stake. Current program participants focus on payments area

Citi launched the virtual accelerator in 2015. It focuses on mobile banking in APAC region. The program includes mentoring and virtual & on-site bootcamp

Swiss Re launched an InsuTech accelerator in 2016. Acceleration focuses on IoT, systems of engagement and smart analytics. First batch has six startups

Munich Re started sponsoring the Plug and Play IoT accelerator in Silicon Valley in 2015. Up to 10 startups per year get the chance to participate in the program



Corporate Venture Capital

Citi Ventures was founded in January 2010 and made its first investment in January 2011. By November 2015 the portfolio had 23 active startups

After three years of running an internal VC fund of \$100m, **BBVA** redirected all activity into a separate LLP – **Propel Venture Partners**, which is today a \$250m fund

Santander launched its \$100m fund in 2014. The portfolio includes among other iZettle, myCheck, Kabbage, Elliptic

Commerzbank launched **CommerzVentures** in October 2014. Current investments include eToro, iwoca, marga, GetSafe and Mambu

AXA launched its €200m VC fund in early 2015. The fund provides startups with capital, technical expertise and market access

XL Catlin launched its VC fund XL innovate in April 2015. Primary focus lies in risk underwriting. The latest investment was in the startup Lemonade



Corp-Up

Deutsche Bank launched in 2015 a computerized investment advisory services platform that was developed by **Fincite**

Deutsche Bank plans to launch a collaboration with **figo**, whereby clients can manage all their assets via DB online and mobile channels

Canadian bank, **Scotiabank**, teamed up with **Kabbage** in 2016 to provide small business loans up to \$100k to new lending customers



M&A

BlackRock, acquired **FutureAdvisory** in 2015 to enable financial institutions to leverage the platform to serve mass affluent and millennials

Challenger **Atom Bank**, acquired **Grasp** in 2016 to improve their user experience, which is their USP

BBVA, acquired the Finish startup **Holvi** in 2016 to expand its online banking capacities

France's second biggest bank, **BPCE**, acquired digital banking pioneer **Fidor Bank** in 2016 to enhance its digital banking technology

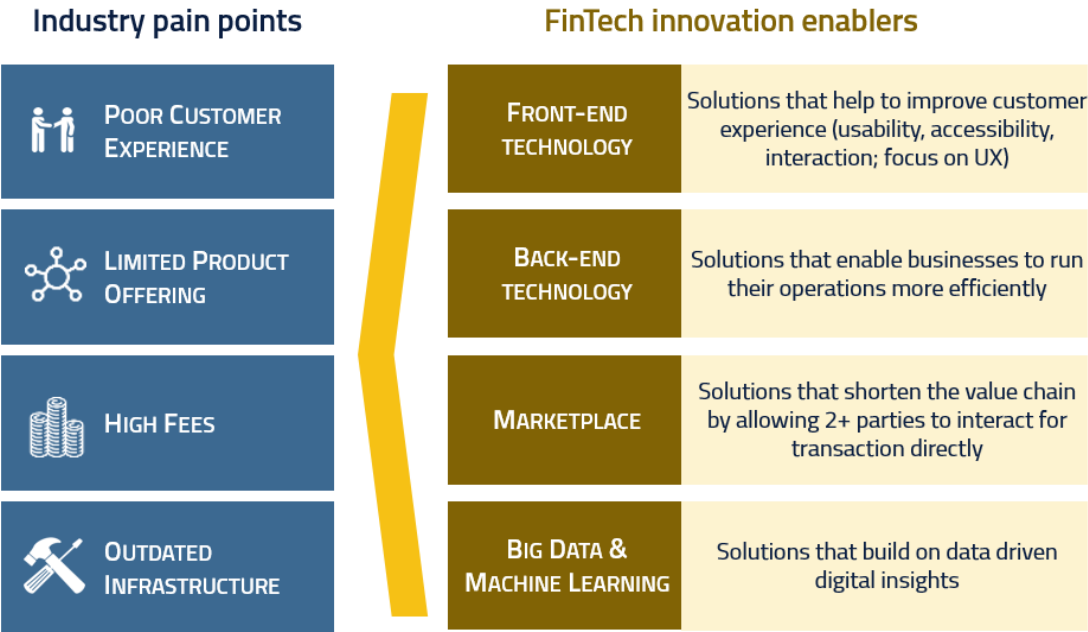
Northwestern Mutual, acquired **LearnVest** in 2015 for \$250m to improve its financial planning capacities

FinTech Incumbents Tackle the Aches with Four Innovation Enablers

Front-end technology rules

Out of the four enablers front-end technology is the most popular one being utilized by 35% of the startups

We analyzed the business models of more than half thousand startups to understand, which innovation enablers they utilize to tackle the financial industry’s four aches. Four categories emerged from the analysis (see graph).



Source: Match-Maker Ventures analysis

FinTech space is growing

In 2015 global FinTech investment volume reached USD 22.2bn, of which USD 2.6bn was InsurTech

Front-end technology is the most popular innovation enabler comprising 35% of all startups. Back-end technology is the second most popular with 29%. Marketplace stands third with 18%. Big data & machine learning is utilized by the least amount of startups (17%).

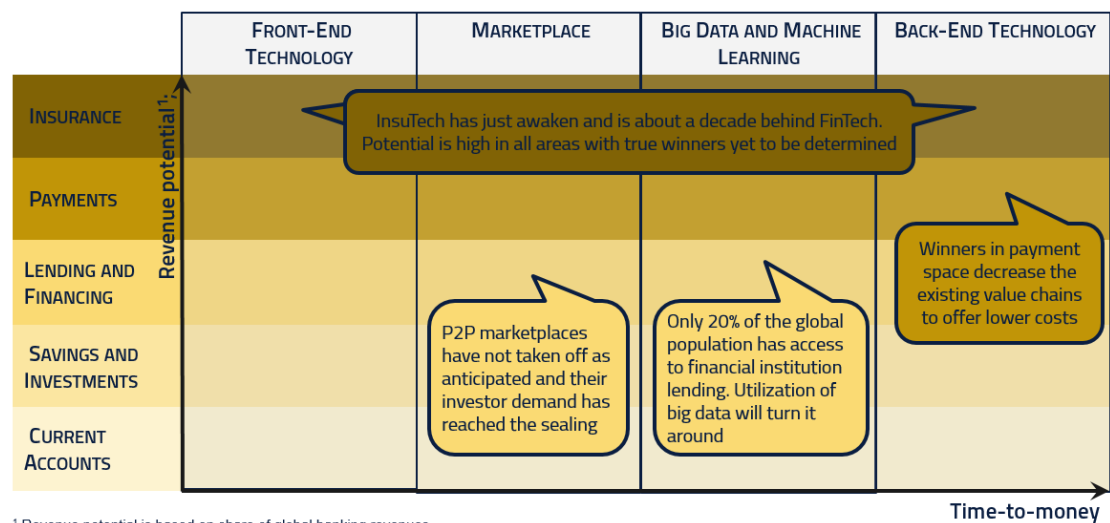
Digging into the overall FinTech space, we can witness it’s notable size and growth over the past years. In 2015 venture capital firms invested worldwide USD 128bn into 7,872 deals. In the same year FinTech investment volume reached historic high at USD 22bn, which forms almost fifth of the global VC investments. The 2015 FinTech investment volume corresponds to 1,108 deals. FinTech investment volume has grown exponentially since 2013, when it stood just at USD 5bn.

FinTech space forms one-fifth of global VC investments

In 2015 global VC investments were USD 128bn, of which USD 22bn was into FinTech

InsurTech investment volumes are still relatively small standing at USD 2.6bn in 2015, yet the growth rate in that field has been comparable to that in FinTech. InsurTech global investment volume was just USD 324m in 2013.

No doubt, that the FinTech space is growing and is swallowing notable share of the global VC investments. Analyzing the four FinTech innovation enablers in more depth and mapping them against the industry's revenue origination reveals the FinTech areas with highest potential (see illustration).







Insurance and payments comprise biggest share of industry revenues. InsurTech is still in baby shoes as it awakened recently and is lightyears behind FinTech developments. This leaves room for winners to emerge in all four innovation enabler categories.

Payment area has seen FinTech solutions for decades, yet they have not been able to overthrow the existing legacy systems. Many payment incumbents build their systems on top of existing platforms maintaining degree of dependency on the old (e.g. Transferwise can't live without banks payment systems, ApplePay relies on existence of credit cards). True winners in payments will utilize back-end technology in a way that bypasses fully the existing payment platform. Such solutions can be achieved, for instance, with Blockchain technology and are yet to be witnessed.

Lending and financing falls third in the revenue potential. However, as only 20% of the global population has access to financing, the space itself has high potential, especially in big data & machine learning.

Marketplaces in any area are yet to face their full life cycle, upon which the moment of truth arrives. It is too early to make firm conclusions before the cycles have fully closed. Over the recent periods, investor appetite in P2P marketplaces has decreased, leaving certainly room for deliberation.

As such, leaving the marketplaces yet to face their faith, in three remaining innovation enabler categories a few key questions can help to identify the winners:

Key Addressed Pain Point(s)	Front-End Technology			Big Data and Machine Learning		Back-End Technology	
	 Poor Customer Experience			 High Fees	 Limited Product Offering	 Outdated infrastructure	
MMV Compatibility Test	<ul style="list-style-type: none"> Does it offer shorter, more intuitive customer journey and/or omnichannel capabilities? Does it offer easy and fast implementation and integration on both ends (corporate and customer)? Does it offer fairly limitless scalability? 			<ul style="list-style-type: none"> Does it expand the product offering and/or lower the fees? Does it offer easy and fast integration? Does it offer fairly limitless scalability? 		<ul style="list-style-type: none"> Does it increase the corporates' operational efficiencies? If it's core banking, does it replace the legacy systems fully? Does it offer feasible integration? 	

Source: Match-Maker Ventures analysis

CONCLUSIONS

It’s a looming reality that the 2007/8 financial crises changed the financial industry forever and gave ideal seeding ground for the birth of FinTech startups. Over the past decade FinTechs have been flourishing and crowding the space while tackling the industry’s four key aches. Even thou, today, out of the four innovation enablers most of the startups are utilizing front-end technology, we believe that the FinTech space will shift the gear toward higher utilization of back-end technologies and big data & machine learning, as these will be the true change facilitators. Back-end technology is just starting to grasp the concepts of blockchain, service-oriented architectures and microservices. In the big data & machine learning fraud prevention and scoring models will continue evolving to drive the cost reduction and to open the options for unbanked and underbanked consumers.

The complexity of the labyrinthine FinTech landscape is far from decreasing. To the contrary, we believe the width and depth of the FinTech will become increasingly tangled over the next decade, while new technologies keep emerging and consumer expectations increase. The best way for corporates and startups to navigate in this labyrinthine landscape is to grab each other’s hands and to collaborate.

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