## Blurred lines: How FinTech is shaping Financial Services in Luxembourg

Global FinTech Survey April 2016





**63%** 

of Luxembourg's survey participants expects FinTech to boost revenues in the financial sector

## 83%

of respondents in Luxembourg is not very familiar with blockchain technology



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### "We thought we knew our customers, but FinTechs really know our customers."

A senior executive at a global banking organisation.

### Key findings from the PwC Global **FinTech Report 2016**

FinTech is changing the Financial Services (FS) industry from the outside in. We estimate within the next 3-5 years, cumulative investment in FinTech globally could well exceed \$150bn, and financial institutions and tech companies are stepping over one another for a chance to get into the game. The result is a new competitive landscape and playing field. As the lines between traditional finance, technology firms, e-commerce and telecom companies are blurring, many innovative solutions are emerging and there is clearly no straightforward solution to navigate this FinTech world.

The insights shared in this report are based on a unique and comprehensive global survey of over 500 senior FS and FinTech executives looking at the current and emerging trends in FinTech. We complemented the study with our own insight and analysis into why FinTech is disruptive and how different organisations can and should respond to its challenges. The report is also fuelled with proprietary research from DeNovo, a new platform powered by Strategy& and PwC, focused on FinTech innovation and its impact on financial institutions.

The full report is available from pwc.lu/fintech



FinTech is shaping FS from the outside in

Where traditional financial institutions have failed. FinTechs are succeeding

**Disintermediation:** FinTech's most powerful weapon



Time to get off the bench: over 20% of FS business at risk to FinTechs



Blockchain: an untapped technology is rewriting the FS rulebook



Heading for bargain basement FS? FinTech is slashing costs



The free lunch is over: FS must leverage the FinTech ecosvstem



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### *Introduction Luxembourg: where innovation meets finance*

FinTech, a game-changing alloy of technology and finance, blends innovation-focused technology companies with traditional financial sector players. By introducing novelty product and service solutions, FinTech is the magical ingredient that re-shapes traditional financial industry providers' offering by encouraging customer centricity; it also adds substance to relationships clients have with financial companies.

The merger of these two different business approaches, the tech and the traditional one, is the bedrock of the future financial sector landscape. Increasing complexity and velocity of change in the financial industry will only gain speed.

On the following pages of this report we will present the state of the art and the possible future development directions and impact of FinTech in Luxembourg. The findings of this report are based on the 2016 PwC Global FinTech Report in which the rise of new technologies in the financial industry is assessed globally. It measures the potential impact of FinTech on market players and looks at their attitudes regarding the latest technological developments. In this paper, however, the spotlight is on FinTech in the Grand Duchy of Luxembourg.<sup>1</sup> Luxembourg, with its modern financial institutions is well positioned to take reigns of the FinTech revolution.



<sup>1</sup> Based on the responses of 36 participants from Luxembourg. Please refer to Appendix for detailed participant profiles.

### Adapting to change: rising FinTech awareness in Luxembourg

With its vibrant ecosystem of financial institutions, technology companies, R&D centres, and a highly diversified and specialised economy, Luxembourg is an emerging FinTech innovation hub.

The country already provides factual support to innovation by encouraging private and public funding, and by building up a true start-up support ecosystem: the government put FinTech as one of the six key domains of the Digital Lëtzebuerg Strategy launched in 2014, aimed at turning Luxembourg into a digital nation, and mandated Jeremy Rifkin, a renowned economist, to examine and advise on how the Grand Duchy can leverage its FinTech potential.



#### Luxembourg's key private sector players at a glance:

- 144 banks representing 28 countries
- 9 payments institutions and 5 electronic money institutions
- 94 insurance companies
- **226** reinsurance firms
- Over 800 fund promoters from more than 50 countries domiciled their funds in Luxembourg
- Home to over **50** private equity firms, including nine of the world's top **10** leading companies
- More than **85** promoters of real estate funds
- The Luxembourg Stock Exchange is the worldwide leader in international bond listing, with over **40,000** tradable securities from **100**+ countries, in more than **50** currencies
- Top-choice business location for new technologies and e-commerce giants, including: Amazon, eBay, PayPal and Rakuten
- Many start-ups and technology companies are developing solutions around a wide range of FinTech activities: from compliance and risk-management, through blockchain and cryptocurrency, security and authentication, automated investment services, Big Data analytics, to mobile and e-payments

The Grand Duchy provides an attractive ecosystem not only for FinTech companies, but for business in general. It is among the three leading financial centres in the European Union<sup>2</sup>, the second-largest investment fund domicile in the world, after the US, with EUR 3.36 trillion assets under management (February 2016). It is also the largest international wealth management centre in the Eurozone and Europe's number one cross-border insurance centre. The fund industry is one of the main pillars of the Luxembourg economy and contributes one third to the country's GDP. Luxembourg is one of just nine countries globally – and only two in the Eurozone – that is AAA-rated by all three major ratings agencies (S&P, Fitch, Moody's). Adding its innovative and responsive regulatory environment, Luxembourg is the epitome of a FinTech-aware business environment. Local market players seem to perfectly understand that by embracing the FinTech business model, the Grand Duchy is on the right path to further strengthen its recognition and reputation among investors, clients and the start-up community.

Internet, mobility, social networking and the rise of price comparison websites have changed the game over the past decade and have created a new generation of customers who demand simplicity, speed and convenience in their interactions with financial providers and even with their peers.<sup>3</sup> Traditional market players have started adapting to new market demands. The need to meet changing customer expectations with new offerings (resulting in an increased focus on the client experience) is top-of-mind for 86% of Luxembourg respondents when asked about the most important impact of FinTech on their business.

There are many PSFs (Professionals of the Financial Sector) in Luxembourg, under the supervision of the regulator, the Commission de Surveillance du Secteur Financier (CSSF), which are already leveraging their ICT capabilities to service the financial sector and/or playing a financial intermediary role. Moreover, an increasing number of companies is entering this new playing field in Luxembourg. Many start-ups and technology companies are developing solutions around a wide range of FinTech activities: from compliance and risk management, through blockchain and cryptocurrency, security and authentication, automated investment services, Big Data analytics, to mobile and e-payments.<sup>4</sup>

#### Figure 2: Impact of FinTech on traditional financial industry businesses in Luxembourg

In which areas do you see the most important impact to your business from FinTech?



Source: PwC Global FinTech Report 2016, Luxembourg-based respondents

<sup>2</sup> Global Financial Centres Index, September 2015.

<sup>&</sup>lt;sup>3</sup> For more information please refer to PwC's article in *The FINTECH Book: The Financial Technology* 

Handbook for Investors, Entrepreneurs and Visionaries, 2016.

<sup>&</sup>lt;sup>4</sup> For more information, please refer to Luxembourg for Finance's *Shaping the Future of Finance* brochure, 2016.

# Business at risk: 26% of the traditional financial sector in Luxembourg may be lost to FinTechs

## According to our survey, nearly all (94%) respondents from the traditional financial industry believe that part of their business is at risk of being lost to standalone FinTech companies.

Incumbents believe that more than a fourth part (26%) of their business could be at risk due to further development of FinTech, though FinTech companies anticipate that they will be able to take over only 10% of incumbents' business (compared to 33% globally – according to our global sample of FinTech companies).

In this regard, the asset & wealth management industry is feeling particular pressure from FinTech companies. Luxembourg's asset & wealth management industry respondents believe they could lose up to 36% of their business (compared to 22% according to global respondents). On the other hand, insurers in Luxembourg may be underestimating the threat posed by FinTech with an estimated share of business at risk of only 10%, compared to 21% for global insurance participants.

However, not only are traditional financial industry providers concerned about losing part of their business to FinTechs, they are also aware that their ways of working and product offerings will be challenged and possibly transformed. While traditional financial institutions in Luxembourg see pressure on margins as the top FinTech-related threat, information security/privacy is equally a concern (66% in Luxembourg compared to 56% globally), followed by loss of market share (46% in Luxembourg versus 59% globally) and increase of customer churn (40% in Luxembourg 53% globally).

### Figure 3: Incumbents' view of estimated share of business at risk to standalone FinTechs in Luxembourg

What percentage of your business is at risk of being lost to standalone FinTech companies within 5 years?



Figure 4: Top threats related to the rise of FinTech within the Luxembourg financial sector



Source: PwC Global FinTech Report 2016, Luxembourg-based respondents

### "FinTech will complement banking services, but it will not fully replace them"

Head of Innovation at one of the largest banks in Luxembourg.

### The upside: cost optimisation and revenue growth

#### Threats aside, traditional Luxembourg players also see FinTech as unveiling hidden opportunities.

FinTech companies rarely replace full-service offerings of traditional actors. Instead they focus on specific areas and can drastically enhance parts of the financial sector's value chain. Embracing FinTech could help slash costs of incumbents' businesses - the majority of Luxembourg respondents (63% compared to 73% globally) rated cost reduction as the top opportunity. As estimated by Santander, banks could reduce their infrastructural costs by up to USD 20 billion globally by the vear 2022 by adopting blockchain solutions.<sup>5</sup>

Luxembourg respondents are more optimistic compared to the global average when it comes to expectations around FinTech creating additional revenues (63% versus 56% globally). Financial services providers are sitting on a goldmine of untapped data which will play an important role in FinTech development. In fact, powerful, low-cost analytical tools and computer technology introduced by FinTech enable companies to mine Big Data, identify emerging trends and develop unique insights.6

And there is still more as FinTech is deemed helpful also in differentiating from competitors (57% in Luxembourg versus 62% globally) and improving customer retention (49% in Luxembourg versus 57% globally).

<sup>5</sup> For a more detailed analysis please check The FinTech 2.0 Paper: rebooting financial services by Santander InnoVentures. 2016.

In your opinion, what are the opportunities related to the rise of FinTech within your industry?

Figure 5: Top opportunities related to the rise of FinTech in Luxembourg



Source: PwC Global FinTech Report 2016, Luxembourg-based respondents

<sup>6</sup> See also PwC's Capitalizing on the promise of Big Data publication, 2016.

# Top FinTech priorities in the Luxembourg financial sector

FinTechs inadvertently compel traditional players to shift their business strategies and reshape their product and service offerings. Each sub-segment of the Luxembourg financial scene prioritises different trends and approaches.



# Top FinTech priorities for fund transfer & payments

## Over 80% of Luxembourg respondents from the fund transfer & payments sector see increased value-added merchant services as a top emerging FinTech trend.

In an effort to differentiate from competitors and create new revenue streams on top of commoditised payment routines, the payments sector is looking to improve services to merchants by enhancing data analytics, offering reward/loyalty programs or advancing refund management.

Our survey shows that Luxembourg respondents (72%) also focus on reducing payments risks to protect consumers from identity theft, fraudulent transactions and account falsification while pushing for faster payments and leveraging international/ cross-border transfer platforms.

### Figure 6: How likely is your company to respond (e.g. allocate resources to, invest in, etc.) to these emerging FinTech trends in your industry over the next 5 years?



% of respondents being likely or very likely to respond to these trends

### Top FinTech priorities for banks

#### All Luxembourg participants from the banking sector are likely or very likely to simplify and streamline product application processes.

The move towards such solutions allows to improve customer experience and reduce the amount of manual work, cutting down time and reducing errors.

Equally important for Luxembourg respondents is the move towards non-physical or virtual channels. Virtual banking platforms equip customers with on-demand access to manage accounts, pay bills, apply for loans and perform other banking activities through a single portal. Banks may use these channels to collect data from customers, offer compelling value propositions and potentially create new revenue streams.

Finally, survey participants also see improved methods to reach, engage and retain customers as a priority among the emerging FinTech trends. This can be achieved in various ways, including offering a more collaborative environment to customers or using gamification techniques.

### Figure 7: How likely is your company to respond (e.g. allocate resources to, invest in, etc.) to these emerging FinTech trends in your industry over the next 5 years?



% of respondents being likely or very likely to respond to these trends

### Top FinTech priorities for insurers

As is the case in other financial industry segments, insurance companies are investing in the design and implementation of more self-directed services for both customer acquisition and servicing.

This allows companies to improve their operational efficiency while creating innovative user experiences (e.g. tracking the value of your belongings or getting a quote by entering your car vehicle identification number or your home address).

Remote access and data capture is highly rated by the majority of Luxembourg survey participants (57%). This trend relates to the use of non-traditional data capturing devices to improve risk and loss assessments. It includes the impact of the Internet of Things (IoT) and the use of drones and advanced imagery analytics.

To a lesser extent, usage-based insurance (UBI) is also seen as one of the most likely emerging FinTech trends in Luxembourg (43% of participants). Despite data privacy challenges, UBI may be an opportunity to underwrite risk in a more granular way by using behavioural variables and it may help decrease costs for customers.

### Figure 8: How likely is your company to respond (e.g. allocate resources to, invest in, etc.) to these emerging FinTech trends in your industry over the next 5 years?



% of respondents being likely or very likely to respond to these trends

## Top FinTech priorities for asset & wealth managers

While our global results highlighted "increased sophistication of data analytics to better identify and quantify risk" as a trend asset & wealth managers were the most likely to respond to (81%), a lower proportion of Luxembourg participants (63%) deems it important.

Instead, since they operate in the leading international wealth and fund distribution centre, Luxembourg participants (74% being likely to respond to that trend) put more emphasis on the 'rise of alternative distribution and marketing channels (including social media and mobile phones) for increased awareness and lead generation', and on 'omni-channel interaction and distribution models to help standardise experience across all points of contacts' (69%).

The automation of asset allocation and how wealth is managed is also seen as a topic likely to be addressed by Luxembourg players. Automated investment advice puts pressure on traditional advisory services and fees and poses a significant threat to operators in the execution-only and self-directed investment market. Robo-advisory solutions may also provide a viable answer to create profitable relationships with investors in possession of fewer assets.

### Figure 9: How likely is your company to respond (e.g. allocate resources to, invest in, etc.) to these emerging FinTech trends in your industry over the next 5 years?

% of respondents being likely or very likely to respond to these trends



### Blockchain: high on the agenda, but still underexplored

### Our insight is that blockchain represents the next evolutionary jump in business process optimisation technology.

If blockchain gains wider acceptance, it could lead to significant changes in back-office roles, as ownership could be transferred without the need for intermediaries and reconciliations would disappear once there is a shared ledger that all parties agree on. Potential use cases, specifically for Luxembourg, would include, for example, the automation of processes in the fund industry, speeding up settlement times of transactions and the streamlining of current processes through the use of smart contracts.

In Luxembourg, the majority of respondents (60%) recognises blockchain's importance and is much more willing to respond to blockchain when compared to global respondents (except for asset & wealth managers). However, none of the respondents declares being extremely familiar with the technology. Only 17% believes being very familiar with it, 29% moderately, while one in five Luxembourg industry players is not familiar with blockchain at all.

A deep understanding of blockchain requires knowledge that intersects various disparate fields; as a result, its commercial applications are still underexplored. In our view, taking a proactive approach to understand the implications and impact blockchain may have on the financial sector is crucial to stay ahead of the game. Moreover, the ability to collaborate, at both a strategic and business level, with a few key partners could soon become a competitive advantage of Luxembourg financial industry. Figure 10: How likely is your company to respond (e.g. allocate resources to, invest in, etc.) to blockchain in your industry over the next 5 years?



Source: PwC Global FinTech Report 2016, Luxembourg-based respondents

% of respondents being likely or very likely to respond to blockchain

### Aligning ways of working...

Almost half (44%) of Luxembourg financial sector players believes that FinTech is integrated at the heart of their corporate strategies. However, more than 50% either does not have a fully aligned corporate FinTech strategy or FinTech does not play a role in their strategic corporate agenda.

There is no clear industry-wide trend in terms of how traditional players deal and engage with FinTechs. More than a third (34%) engages in joint partnerships with FinTech companies, 31% buys and sell services to FinTech companies, 14% rebrands purchased FinTech services (white-labelling), 14% launches FinTech subsidiaries, one in ten establishes start-up programs to incubate FinTech companies and 7% sets up venture funds to fund FinTech companies. Surprisingly, 21% of Luxembourg participants does not deal with FinTech at all.

### "We work with start-ups in order to have innovative solutions for our clients"

Head of Innovation at one of the biggest financial services providers in Luxembourg.

#### Figure 11: How is the Luxembourg financial sector dealing with FinTechs?



### ...and overcoming barriers

When both parties (traditional financial and FinTech companies) are asked about the biggest impediments when dealing with one another, incumbents name regulatory uncertainty<sup>7</sup> (68%), IT security (45%) and differences in operational processes (45%).

FinTechs, on the other hand, are mostly concerned about different management culture when dealing with incumbents (67% of respondents) and IT security (50%) is also a concern.

While the responses from Luxembourg participants are generally aligned with the global ones, the required financial investments for Luxembourg FinTechs when dealing with traditional financial companies (50%) clearly stand out. Globally, this issue is FinTechs' smallest concern, raised only by 28% of survey participants.

#### Figure 12: Top 3 challenges for incumbents and FinTech companies

What challenge do you face in dealing with traditional financial/FinTech companies?



<sup>&</sup>lt;sup>7</sup> FinTech represents a challenge to regulators, as there may be a risk of an uneven playing field between the traditional financial sector and FinTech companies. In fact, 86% of financial industry CEOs globally are concerned about the impact of overregulation on their prospects for growth, making this the biggest threat to growth they face. However, the problems do not relate to specific regulations, but this is rather about how regulations can remain relevant in the digital age. For more details please check PwC's *Financial services legislation: Remaining relevant in the digital age* report, 2016.

### **Conclusion** Luxembourg is on a FinTech Journey

PwC FinTech Survey demonstrates that Luxembourg financial institutions are not ignoring the threats that FinTech companies pose to their business models: as a result of competition with FinTechs, as much as 26% of their business might be at risk over the next five years. Increasing pressure on margins, as well as information and security threats are at the top of the incumbents' threats list. Nonetheless, Luxembourg participants also recognise FinTech-related opportunities, especially in the area of improving customer experience and meeting changing customer needs by pairing them with new offerings; traditional players also expect to boost their businesses by gaining access to sophisticated operational capabilities.

That said, not all incumbents in Luxembourg have adjusted their strategies to face these new developments and embrace FinTech solutions. Given the speed of technological change, financial institutions cannot ignore FinTech as they need to define their strategic intent and adapt their executional capabilities. Achieving this means commencing a FinTech journey that would be marked by the following stages:

- *Choosing your spotlight:* information on FinTech is somewhat dispersed and obscure. In order not to be overwhelmed with the data, it is critical to filter the noise around FinTech and focus on the most relevant trends and growth areas. Having a clear and consistent message regarding your willingness to play in this space will help your company differentiate from the competition.
- Enhancing the value proposition while going lean: financial institutions should make the most of their position of customer trust, brand recognition, access to data, and knowledge of the regulatory environment by adapting a customer-centric operating model. As such, financial sector providers become facilitators of services that enable clients to acquire advice and interact with relevant actors through multiple channels. To embrace such an approach and deliver satisfactory products and services, they may move towards a more collaborative approach and leverage the new FinTech ecosystem to facilitate the integration of innovative capabilities.
- *Putting your culture in motion:* incumbents need to develop the right organisational architecture that will enable the infusion of innovation across and beyond organisational boundaries. Establishing the right cultural norms to effectively communicate, collaborate and interact within the FinTech landscape are key elements to achieve success.
- *Shaping your future:* looking ahead, anticipating future demands and reimaging their future capabilities should be at the centre of attention of traditional financial industry players. The impact of blockchain on your activities, with its potential to rewrite Luxembourg's financial sector's rulebook, needs to be considered sooner rather than later.

FinTech is re-shaping the financial sector at such a pace that those players that stay behind today might not even recognise the sector in five years. With their potential, Luxembourg players, however, have all the capabilities to stay at the heart of the FinTech revolution. The golden rule: start embracing FinTech now.

### *Appendix* Participant profile

The 2016 PwC Global FinTech Survey, gathers the view of 544 respondents from 46 countries, principally Chief Executive Officers (CEOs), Heads of Innovation, Chief Information Officers (CIOs) and top management involved in digital and technological transformation, distributed among five regions.

The Luxembourg-focused cut was based on the responses of 36 respondents from the financial industry's major market players.

### Breakdown of survey participants in Luxembourg



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