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INFRACHAIN PROJECT LEAD

Ideation to actualisation: how Luxembourg is harnessing Blockchain

THE POTENTIALLY DISRUPTIVE POWER OF BLOCKCHAIN - A DISTRIBUTED LEDGER TO RECORD ALL TRANSACTIONS IN A FORMAT THAT IS CHECKED AND AUTHENTICATED BY PARTICIPANTS - HAS BEEN THE HOTTEST DISCUSSION TOPIC IN FINANCIAL SERVICES IN RECENT YEARS.

LUXEMBOURG BENEFITS FROM PIONEERING PRIVATE SECTOR BLOCKCHAIN INITIATIVES AS WELL AS THE COUNTRY'S EFFORTS TO BUILD A NATIONAL BLOCKCHAIN INFRASTRUCTURE. AS THE LARGEST INVESTMENT FUNDS CENTRE IN EUROPE, LUXEMBOURG IS TAKING THE DRIVING SEAT TO BUILD A EUROPEAN BLOCKCHAIN INFRASTRUCTURE TO ENSURE THE SECTOR CAN LEVERAGE ITS FULL POTENTIAL.

LUXEMBOURG COMPLETES FIRST LIVE BLOCKCHAIN TRANSACTION

Last year FundsDLT, a collaboration between Fundsquare (a subsidiary of the Luxembourg Stock Exchange), InTech (a subsidiary of POST Group) and KPMG Luxembourg, launched a new blockchain-based digital fund distribution platform for asset managers. Natixis Asset Management, a leading affiliate of Natixis Global Asset Management, became the first company to test the platform when its investors successfully purchased shares in its funds through the FundsDLT platform. This transaction became the first real blockchain transaction in the history of investment funds.

BLOCKCHAIN POWERED PLATFORM FOR ASSET MANAGERS

The group decided early on in 2016 to develop the first prototype – a tool that can manage the entire process of fund distribution by bringing closer together and inter-

connecting the various actors of the fund industry: distributors, transfer agents, asset managers, custodians, cash clearers as well as functions such as shared KYC repository.

“The aim is to use Distributed Ledger Technology and SmartContracts to automate processes and thus reduce the need for reconciliations and increase transaction speed. Blockchain will also provide us with a toolbox to address certain issues in the fund industry,” says Olivier Portenseigne, Managing Director, Fundsquare.

RESHAPING FUND DISTRIBUTION

FundsDLT believes blockchain will play a significant role as an enabler to create complementary and alternative distribution channels and ways of operating. The project is focusing on how to enhance delivery and ensure funds reach the mass market.

“We are streamlining a range of fund administration and order-routing tasks by using blockchain to automate several processes securely.”

“We are setting up an environment which is close to a public chain environment but putting a governance layer on top.”

MARCO HOUWEN

The model applies to a wide variety of funds and does not depend on the jurisdiction,” says Portenseigne.

“From an investor perspective, it’s a mechanism to route order, settle and maintain a register. First, the investors use the FundsDLT mobile app to submit the standard subscription order for the shares. Via the API the order is transmitted to the FundsDLT platform, and the information is immediately and simultaneously transmitted using blockchain technology to the fund promoter and the other parties involved in the transaction, each one having its node on the FundsDLT blockchain.”

With the successful completion of the first transactions, the team plans to launch a blockchain engine for clearing and settlement by 2018.

“Having an app over an iPhone where you can easily buy funds will make a huge difference to the client experience,” adds Portenseigne. “This is a big opportunity for asset managers to distribute their funds directly to the customer. Currently, only 10% of people in Europe are investing into funds, so the potential is enormous.”

BUILDING A BLOCKCHAIN INFRASTRUCTURE FOR THE GLOBAL FUND INDUSTRY

FundsDLT has been working closely with all the actors from the public and private sector on building what they hope to be the European Fund Infrastructure for the global fund industry.

“Regulatory changes would be required to take full advantage of blockchain technology, so we involve almost all the ecosystem around the fund industry to find solutions and ensure regulation keeps up with the rapid technological change. Our vision is to have one single funds infrastructure in Europe on Blockchain. This evolution will require a shift in mindset, but we need to adapt quickly and to think differently,” concludes Portenseigne.

MANAGING YOUR ASSETS WITH BLOCKCHAIN

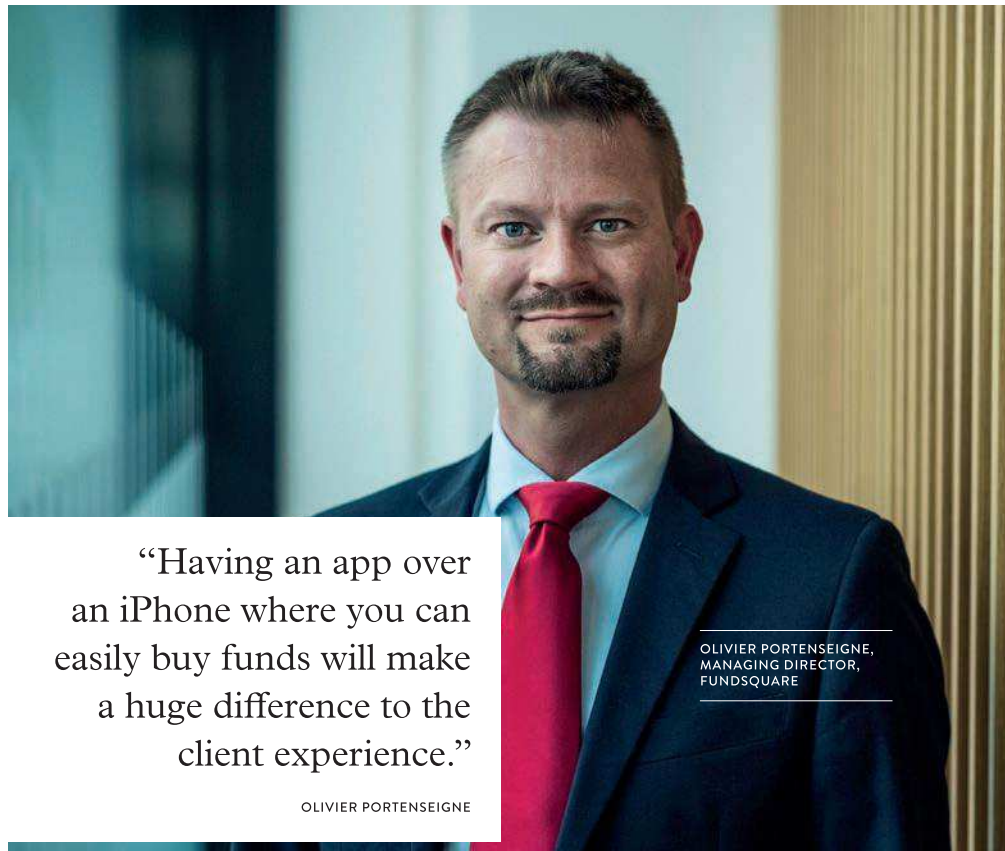
Fundchain is an initiative set up by Scorechain - as featured in the September 2016 edition of LEO - a Luxembourg-based start-up which is working alongside a consortium of key players from the fund industry. After rolling out a smart transfer agent proof of concept (PoC) in December, Fundchain aims to have a distributed ledger-based product ready to bring to market next year.

“Our goal at Fundchain is to work collaboratively with major players in the financial center to put up the network effect Blockchain needs to be effective and powerful,” says Pierre Gérard CEO & Co-founder Scorechain.

OPENING NEW MARKETS TO NEW PLAYERS

“Last year we released a successful prototype which reduces processes and complexity dramatically for all stakeholders regarding funds management, including subscription, redemption, transfer and regulatory assessments. Now we enter into a new phase of Fundchain, and new players are joining the initiative with the goal to build the basis of an MVP - a minimum viable product.”

“Our role at Scorechain is not only to bring more efficiency and to build a new technical infrastructure; it’s more about the new opportunities offered by the Blockchain: how we can target new joiners, open new markets and in a longer term manage the new type of assets. In this context, the role of the actors will evolve,” concludes Gérard.



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OLIVIER PORTENSEIGNE

OLIVIER PORTENSEIGNE,
MANAGING DIRECTOR,
FUNDSQUARE

CREATING A EUROPEAN BLOCKCHAIN INFRASTRUCTURE

“What we are creating is a first mover advantage for Luxembourg and Europe, and the government is supporting the development of our initiative very strongly,” says Marco Houwen, Infracchain project lead, who is creating a European blockchain infrastructure in Luxembourg.

The Infracchain initiative is a non-profit, public-private project, which aims to build the first trusted cooperative blockchain environment worldwide. It is supported by the government, together with the chief technology and financial players in the Grand Duchy. The University of Luxembourg’s Interdisciplinary Centre for Security, Reliability, and Trust (SnT) acts as a research partner.



PIERRE GÉRARD,
CEO & CO-FOUNDER,
SCORECHAIN

“Our unique selling point is that we are creating a pan European community of independent host operators operating blockchain nodes,” says Houwen. *“We are building a blockchain-node environment with an extra governance level allowing blockchain applications to become operational quickly.”*

NEXT GENERATION BLOCKCHAIN PLATFORMS

Infracchain focuses on the blockchain-as-a-service model and will enable the creation of “smart contracts” - a piece of computer code that is capable of monitoring, executing and to enforce an agreement - to be verified through its extensive European node network. This process will simplify and improve upon traditional legal contracts by validating conditions of a contract and enforcing outcomes through code.

“We are setting up an environment which is close to a public chain environment but putting a governance layer on top. This compliance layer has in essence two major parts. The first one is that we are certifying every single host operator which allows us to mitigate the counterparty challenge. We are also creating a “last man standing mechanism” which allows every certified host operator to deliver a Service Level Agreement (SLA) to Infracchain and comply to that. Explained from another angle, Infracchain creates a private chain-like environment and adds 3rd party distributed trust to the mix.”

LOWERING TRANSACTION COSTS AND IMPROVING TRANSPARENCY

Infracchain will provide a mutualised infrastructure and operations, with the aim of lowering the cost of each blockchain instance, thus reducing costly technology and investment which is often an entry barrier for service providers and start-ups.

“Infracchain is a cross-industry effort targeting FinTech, healthcare, public services and the supply chain,” says Houwen. *“The vision is that you go into a portal, then you decide on the blockchain technology you want to use, then you decide on what country you want to have your blockchain nodes running. For example, you might decide that you want to have five nodes in France, five in Germany, two in Luxembourg, and three in Belgium. What is very important is that the only thing Infracchain operates is the orchestration platform. Infracchain never has authority on the nodes or host operator. That is why it is so important that Infracchain is a non-profit organisation,”* concludes Houwen.

These initiatives all aim to support existing businesses as well as to strengthen the blockchain ecosystem, making Luxembourg more attractive for start-ups and blockchain experts from abroad.

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