Bridging cryptocurrency and traditional finance businesses: the case of SpectroCoin-Pervesk

Bridging Cryptocurrency and Traditional Finance Businesses: The Case of SpectroCoin–Pervesk

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Abstract

Vytautas, the chief executive officer and co-founder of SpectroCoin (cryptocurrency exchange) and Pervesk (licensed payment institution) was at a crossroads. The technological interconnectedness of these two firms enabled the use of cryptocurrencies via traditional payment methods, thereby opening global business opportunities in the newly emerging industry. However, the Central Bank issued a warning that regulated businesses, including licensed payment institutions such as Pervesk, should disassociate with cryptocurrencies. Must Vytautas follow the newly issued opinion of the regulator and drop an extremely lucrative idea, which made these two firms become pioneers in the world? Or was there a solution that would allow compliance with the regulations without losing the profits from the innovative business setting? The case fosters discussions on (non)compliance with the regulatory and normative institutional pressures when developing innovative business. The case additionally allows exploring the multifaceted environment that unfolded in Lithuania—the recently emerged European Union's FinTech hub.

1. The slipping opportunity to conquer the global market

In 2009, the world experienced the birth of the first cryptocurrency, Bitcoin, a digital currency built on public permissionless blockchain technology (Nakamoto, 2008, Bhutta et al., 2021). Since then, financial and other markets, as well as their incumbents, international business players, and governmental representatives, have received an immense number of new opportunities and challenges brought about by the so-called crypto economy. The crypto economy and public permissionless blockchain-based innovations were seen as institutional technology that decentralized authority and governance structures and shifted trust from humans to the code (Aste, Taska & Di Mateo, 2017). Constantly evolving, it enabled the development of novel business models, organizational forms, fundraising practices, and decision-making processes of economic actors in different industries (Shirole, Darisi & Bhirud, 2020; Lumineau, Wang & Schilke, 2021; Šilenskytė et al., 2024). Moreover, the transformations brought by the crypto economy were challenging existing, as well as creating new, institutional regulative and normative elements. Within such emerging business and institutional environments, lucrative business opportunities could be captured by FinTech firms (technology-enabled financial innovation firms).

By utilizing the emerging opportunities described above, SpectoCoin, the Lithuanian-origin FinTech firm offering various cryptocurrency exchange services, has been successfully growing since its establishment in 2013. SpectoCoin was an early adopter of cryptocurrencies and operated in the global crypto market, which at that time was unregulated. In this entirely digital world, for a long time, the cryptocurrencies remained used and understood primarily by technology experts—a relatively small and specialized customer group. However, the increasing awareness of the crypto economy among the wider public hinted at the forthcoming billion-dollar business to be captured.

Vytautas, the CEO and one of SpectroCoin's co-founders, realized blockchain's potential to enhance payment quality and the lucrativeness of bringing cryptocurrencies to the wide base of ordinary users. While these ideas seemed tempting, the regulatory limitations were obvious: the ordinary users were customers of regulated financial system firms and were neither trusting nor yet equipped to operate with cryptocurrencies. As a result of this divide, in early 2016, the second firm—Pervesk—was established with the goal of becoming a licenced payment institution, i.e., compliant with the regulated financial industry norms, which would offer traditional bank-type services for old and newly targeted customers and solve challenges related to online payments for noncrypto market participants. The two firms—one operating in the unregulated crypto market and the other operating in the regulated traditional finance

market—connected their services through the technological platform, bridging the two marketplaces and becoming the first entity in the world to capture this unique global opportunity.

Soon after this bridging was completed and the possibility of conquering the world felt so close, on the morning of 10 October 2017, Vytautas was shocked by reading the newly issued statement: "*According to the Bank of Lithuania's approved position, financial market participants should not engage in the sale of virtual currencies, provide conditions for customers to pay in payment instruments issued by them (e.g., debit or credit cards, etc.), execute any operations in virtual currencies, and engage in their exchange or similar activities. Moreover, in their means of communication (website, mobile application, platform, ATM, customer's electronic account, etc.), they should not link their services to virtual currencies and create an impression that such services are supervised and subject to the same security standards as those applicable to financial services are.*" (The Bank of Lithuania, 2017 October 10).

Suddenly, five years of hard work felt meaningless. The brilliant business idea felt like becoming lost. Although this was an official opinion statement, it provided a strong hint about the upcoming potential regulations, which did not seem favourable to the newly established business setting. Vytautas realized that if the co-founders remained only with SpectroCoin's cryptocurrency exchange business, their success would be solely dependent on the highly volatile cryptocurrency market, limiting strategic diversification. However, if the co-founders dropped the crypto business and continued only with the newly licensed payment institution Pervesk, they would need to compete with the traditional banks and run the traditional finance business, in which they did not have much experience.

Was there a way to comply with the regulatory institution's pressure without abandoning the rewarding idea of connecting the divided financial worlds? Vytautas decided to weigh all the factors before taking any further step.

2. A lucrative but risky business environment created by the emergence of cryptocurrencies

For many years, financial markets had been secured through the operations of various institutions that worked to ensure financial stability and trust in value exchanges. For example, in economic units such as the European Union, the European Banking Authority (EBA) was qualified to supervise and carefully regulate the European banking sector (Ferrari, 2020), and the European Central Bank (ECB) ensured that banks followed the rules established by the EBA. The central banking authorities (e.g., ECB or National banks) had a monopoly on the provision and control of fiat money (Velde, 1998). The fiat money issued by the central authority had a form of cash or electronic money and was strictly supervised (Vlasov, 2017). The fiat money in electronic form, i.e., electronic money, could be stored in either physical card-based products or in software-based digital wallets such as PayPal and Google Wallet, which were generally operated by non-banking institutions. However, even in electronic form, they were under the supervision of regulatory institutions. Exchanges with fiat money in any form were rigorously regulated, licenced, and supervised by the governmental authorities and the National Central Bank. The later regulations and supervision were the key to warranting trust when value exchanges between individuals and/or legal entities occurred.

The regulated finance system was shaken by the 2008 Global Financial Crisis, in which it was revealed that financial institutions performed malpractices that led to the global crash of financial markets (Faria, 2019). In response to the mistrusted regulated financial market model, starting in 2009, the public permissionless blockchain was utilized to create new types of various virtual assets, such as cryptocurrencies, for value storage and exchanges (e.g., Nakamoto, 2008).

Cryptocurrency was perceived as a purely digital currency, which relied on cryptographic protocols and a distributed peer-to-peer network of users to mine, store and transfer value without the need for a central authority or trusted third party[1]. This meant that anyone, with the help of the public

[1] In 2013, the European Banking Authority (EBA) explained the concept of cryptocurrency: "a *virtual currency shall mean ungoverned and unregulated digital money, which may be used as a means of payment, but is issued*

permissionless blockchain technology, could issue a financial exchange unit—digital currency (e.g., token or cryptocurrency)—similar to electronic money and perform financial exchanges with others (individuals and/or legal entities) residing anywhere in the world on their own terms. Such application of technology shattered the long-standing finance industry norms, in which only central banks could issue money (e.g., national currency), define its value and supervise the process of exchanges between individuals and/or legal units within and across the countries.

Early in 2013, Bitcoin was the only popular cryptocurrency known to the general public, while by 2017, many other cryptocurrencies existed and gained popularity (Giudici, Milne & Vinogradov, 2020). The rapid growth of the different cryptocurrencies made a handful of existing cryptocurrency exchanges into a billion-dollar business. For example, in 2020, Binance and FTX were making nearly $1 bn profit (Kruppa, 2021).

Since the emergence of the first cryptocurrency in 2009, activities with cryptocurrencies have been neither regulated nor supervised (Faria, 2019; Ferrari, 2020). Cryptocurrencies emerged with the goal of eliminating intermediaries and central authorities supervising financial exchanges. Having no external regulations, the decentralized crypto community, rooted in an open-source culture, created and defined the novel rules of the game (Ryan, Macrossan, Wright & Adams, 2021). For example, the technology-savvy community was comfortable executing financial transactions without verification of each other's identity because transactions on blockchain were immutable due to the technology features (Hassan & De Filippi, 2017). Furthermore, the emergence of smart contracts allowed the transfer of legal rules into technical rules ("Code is Law") and formalized contractual agreements and transactions with self-executing and self-enforcing rules (Hassan & De Filippi, 2017).

Consequently, the unregulated cryptocurrency operations and technology-enabled trust mechanism created a space for revolutionary developments, supporting both legal and illicit business activities. For example, for legal businesses, crypto-related operations revolutionized the remittance industry by reducing transaction fees compared with those charged by traditional financial service providers. Market participants, who had no or little access to the services provided by banks, were granted access to bank-type services and the possibility of making payments in cryptocurrencies using their mobile phones (Turner & Irwin, 2018). Cryptocurrency exchanges became one of the first services in crypto space, which enabled users to establish market prices and trade these currencies (Hileman & Rauchs, 2017). Cryptocurrency exchanges were online platforms in which users could exchange (buy or sell) cryptocurrencies or exchange cryptocurrencies for fiat currencies (e.g., EUR, USD). Later, lucrative crypto exchanges started to offer services such as cryptocurrency wallet, a software that enabled storing, sending and receiving digital currency (Manski & Manski, 2018).

Regarding illegal businesses, cryptocurrencies were linked to the online drug industry (Martin, 2014) and cybercrime-as-a-service (Vigna & Rudegea, 2017), raising a number of concerns regarding money laundering and terrorism financing (Pflaum & Hateley, 2014). The crime investigation authorities had difficulties obtaining records for Bitcoin transactions and tracking the identity of suspicious anonymous users (Turner & Irwin 2018).

The list of threats further expanded by various crypto market developments. The high volatility of cryptocurrency as a new asset class had significant price swings, creating fertile soil for speculation (Korauš et al., 2018). The initial coin offering (ICO), a new corporate fundraising practice performed by issuing coins or tokens to fund new product development projects, fell out of the scope of the existing legal frameworks. Anyone could issue coins or tokens for funding new product development projects (Boreiko & Sahdev, 2018) without necessarily executing the project after the funds were collected (Huang et al., 2020). These new possibilities often encouraged opportunistic behaviour and fraud (Ferrari, 2020; Huang et al., 2020), which led to serious risks for investors and consumers, financial crimes, and diminished market integrity (Marian, 2018; Edwards et al., 2019).

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into circulation and guaranteed by an institution other than the central bank." (European Banking Authority, 2013)

Due to a number of negative developments within the crypto economy, risk-averse, conservative industry players, governments, and other regulatory institutions started promoting adverse positions towards cryptocurrencies and related operations (Martin, 2014; Marian, 2018). In 2013, the U.S. was a relatively early mover and the first country where different federal agencies started to regulate crypto exchanges (Bellavitis, Fisch, Wiklund, 2021). In 2014, the UK clarified the taxation of income from virtual currency trading, and Singapore announced that cryptocurrency exchanges needed to verify their customers' identities by proposing know-your-customer (KYC) frameworks.

Within the EU, institutions adopted a "'wait-and-see' approach (Ferrari, 2020, p. 328) and warned rather than sentenced crypto market participants (The Bank of Lithuania, 2013 December 31). Since 2013, the EBA has issued multiple warnings for crypto investors, which have been echoed by national regulatory bodies. For example, in 2016, Estonia, which was among the first countries in the world to legalize crypto-related operations, started to regulate cryptocurrency exchange by stating that Bitcoin exchanges shall be subject to Estonian Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) law (Badmus, 2019). Such developments within the EU added to the conflicting perspectives on the crypto economy.

Figure 1 briefly summarizes some of the key events in the crypto economy development process. In summary, the regulatory framework for crypto- and blockchain-based business-related activities was constantly changing, including countries' positions towards such activities (Šilenskytė, Butkevičienė, Dhanaraj, 2022*),* creating much uncertainty and sometimes confusion for industry participants.

Figure 1. Regulatory uncertainty in the crypto economy development process globally

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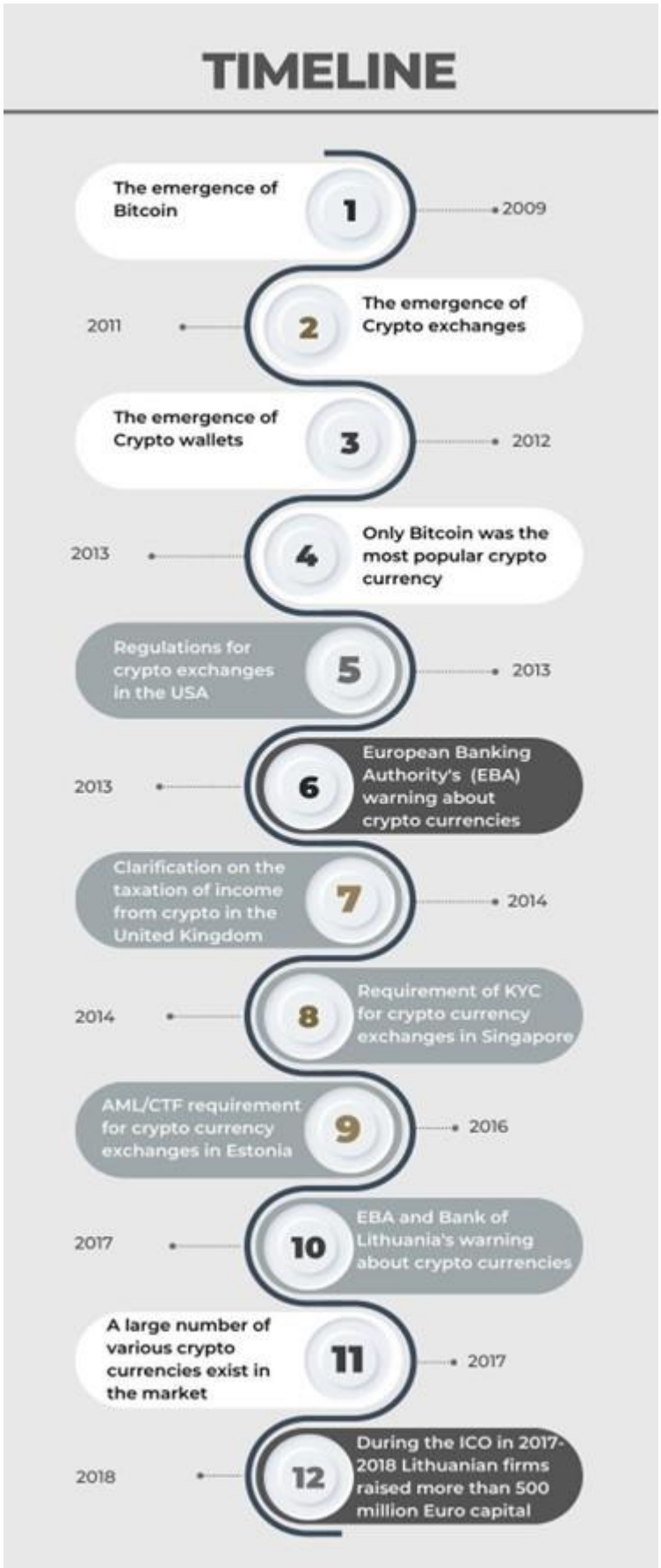

Source: Authors' elaboration

However, neither the diverse regulatory responses nor the negative opinions or risks related to the crypto economy scared entrepreneurs from lucrative new businesses (Šilenskytė et al., 2022). Many business opportunities were noticed by technology-savvy market participants, so the crypto-related community started to dramatically grow globally (EU blockchain forum, n.d). In particular, cryptocurrencies and public permissionless blockchain-based businesses were attractive to emerging countries (Kshetri, 2017, Lim, Wang, Ren, & Lo, 2019), traditional tax havens, e.g., Malta (Marian, 2018), and new economies (e.g., Baltic countries: Lithuania, Latvia, Estonia (Kostrikova, 2021), where market participants were tolerant of various risks (Bellavitis, Fisch, & Wiklund, 2021). The new economies, such as Lithuania, had undergone significant financial crises multiple times during their transition period (Kiyak & Reichenbachas, 2012). This created a relatively unique environment for crypto-related businesses.

3. Performing crypto-related business in Lithuania

Since the restoration of Lithuania's independence on 11 March 1990, the country had seen hyperinflation (1993), internal banking crises (1995), and external currency and debt crises (1998) and was severely affected by the Global Financial Crises (2008-9) (Kiyak & Reichenbachas, 2012). The fragility of regulated financial institutions had been present in the country for at least 20 years. Moreover, for many years, Lithuania did not have an established identity in the global market. It was frequently associated with the post-Soviet countries that strove to reintegrate into the European economy. Later in its transition towards market economy, Lithuania's financial services industry was characterized by a highly concentrated banking sector dominated by three Scandinavian banks (OECD, 2017). In 2017, the Scandinavian parent banks controlled 89.5% of total banking sector assets and 91.4% of total system lending in Lithuania (OECD, 2017). While investments from the Nordic neighbours were highly appreciated, the oligopoly in the financial sector within the country, previously greatly affected by multiple bank crises, raised a sense of cautiousness. To this end, regulatory institutions, entrepreneurs, and market participants were ready for alternatives.

Being an EU member state since 2004, Lithuania had to apply policies made at the EU level in addition to locally issued regulations that could not object to the EU's major legal principles (European Commission, n.d.). The EU directives typically formed part of national legislation, but countries had some freedom to choose how they would achieve the expected results (European Commission, n.d.). Within such a framework, the Government and The Bank of Lithuania took the initiative to develop a FinTech ecosystem and remove all the barriers to successful FinTech operations. One of the essential features of the later FinTech ecosystem was technical infrastructure and access (CENTROlink) to the Single European Payment Area (SEPA) for all payment service providers. Through CENTROlink created in 2015, licenced FinTech firms had reduced barriers to providing international transactions and similar services across the entire European payment area (Toivonen, 2020; CENTROlink, n.d.). The other important advancement was the introduction of a remote digital identity verification method for clients, which enabled the identification of FinTech and traditional bank customers without a need for physical interaction or the need to operate a local physical office for receiving and verifying customers as was previously required in the traditional bank system (Valcke, Vandezande, & Van De Velde, 2015; The Ministry of Finance of the Republic of Lithuania, 2016 16 October).

Lithuania skyrocketed in developing a FinTech-friendly environment (EU blockchain forum, n.d) and within four years took 4th place in the global FinTech 2020 rankings (GFICRR, 2020). With a population approximately one-third the size of London, Lithuania emerged in the financial service industry as a new player among the traditional markets and became a FinTech hub in the EU (GFICRR, 2020).

Among various FinTech ecosystem development initiatives in Lithuania, blockchain-based business (BBB) initiatives and pro-blockchain attitudes were remarkable (EU blockchain forum, n.d). In 2016, Lithuania hosted the first Bitcoin conference in the Baltics supported by the involvement of high-level politicians (Lithuanian Tribune, 2015). In 2017, many newly established BBBs by ICOs raised more than 500 million Euro in capital (Enterprise Lithuania, 2018), with Lithuanian entrepreneurs capturing up to 4% of the entire world's ICOs (Kaal, 2018).

Despite the successful economic activity of BBBs and several pro-BBB friendly steps, the Lithuanian government and the regulatory authorities were carefully observing market developments and balancing the national and EU positions towards crypto-related operations. For example, on 16 July 2014, the Bank of Lithuania, with regard to the EBA opinion on virtual currencies, suggested that "*credit institutions, payment institutions and electronic money institutions refrain from the purchase, storage or sale of virtual currency in order to reduce the risk arising from the interaction of virtual currency schemes and regulated financial services*" (The Bank of Lithuania, 2017 October 10). At that time, the Bank of Lithuania did not forbid or strictly caution about crypto-related operations.

However, on 10 October 2017, complying with the EBA opinion[2] and making a shift in its initially pro-crypto national position, the Bank of Lithuania and the Ministry of Finance issued an updated position regarding crypto-related BBBs (The Bank of Lithuania, 2017). In contrast to the softer 2014 statement, regulatory institutions warned investors and market incumbents to separate the exposure of investments in crypto assets from other investments and carefully evaluate the risk involved in crypto-related activities (The Bank of Lithuania, 2017). Moreover, according to this position, if a market participant decided to engage in crypto-related activities, enhanced due diligence and compliance with AML/CFT rules had to be applied (The Bank of Lithuania, 2017).

Such a shift in the position of national regulatory institutions posed enormous dilemmas for crypto economy participants in Lithuania. Participants in the crypto economy strongly valued autonomy—the freedom to define the rules of the game in peer-to-peer interactions. While Lithuania's regulatory position was initially ready to embrace such emerging industry norms, the enforcement of AML/CFT directives and specifically the KYC procedures in line with the EU's expectations drew BBB industries back to the traditional financial industry rules of the game, in which external institutions required verification of customers' identity and tracked information about the operation type and amounts transacted. Crypto-related firms faced unfavourable regulatory and normative pressures.

4. SpectroCoin and Pervesk: Lithuanian-origin pioneers in cryptocurrency service and payment markets

Since 2009, Justas and Mantas have experimented with blockchain coding and the crypto economy, while Vytautas has explored finance trends in several universities and beyond. The young entrepreneurs ignored negative discourses floating around the crypto economy and dreamed about creating a digital bank that could operate with fiat and cryptocurrencies, ensuring fast and effective payments for both traditional finance and crypto communities. However, considering the novelty of this idea and the amount of funds needed for its implementation, a step-by-step implementation plan was needed.

In 2013, pioneering in the Baltic region, the friends co-founded SpectroCoin—the novel cryptocurrency exchange (Rekvizitai.vz.lt/SpectroCoin, n.d.)—and started cryptocurrency exchange and brokerage services (Spectrocoin, n.d.). Vytautas took the position of CEO, which meant that he decided to carry all the legal responsibility for the firm, operating in a very uncertain environment. The establishment of SpectroCoin allowed generating initial capital for further business development and growth, gaining invaluable experience in freshly emerged business areas, in which only a few entrepreneurs believed and worked.

However, Vytautas had to manage regulatory or regulation-related challenges multiple times. For example, SpectroCoin faced the de-risking challenge, meaning that traditional financial institutions were closing their accounts because crypto users were perceived as illegitimate and prone to money laundering or terrorist financing abuse (Durner & Shetret, 2015). The latter barrier of SpectroCoin business development was signalling that the traditional market was not yet ready to embrace the

[2] The EBA was an independent EU Authority, which worked to ensure effective prudential regulation and supervision across the European banking sector. The Opinion was the instrument, through which it made a statement without imposing any legal obligation, however, the statement provided a strong signal about regulator's expectations (directing both firms and consumers' behaviours) and potentially upcoming legal obligations.

emerging crypto market and was not keen on accepting new business models. The motivation to innovate and lead the emergence of new finance market norms only increased.

There were a number of options by which Vytautas and the team could have addressed the de-risking challenge. Not knowing which option was the best choice, the cofounder team started exploring all of them. The first option was to collaborate with the payment institutions and encourage them to consider cryptocurrency, as its market potential appeared promising. Thus, Vytautas began to search for pro-crypto financial institutions. He tried collaborating with them to collectively create potential operation models that bridged the divided financial markets.

Then, Vytautas had the option to educate traditional financial institutions, regulators and policy-makers by explaining the blockchain and cryptocurrency features, risks and potential solutions for the crypto market. Vytautas was actively involved in public opinion formation by issuing various statements, commentaries, interviews, etc., in the public media, and in 2015, he started his PhD research on the crypto economy at KU Leuven. Additionally, SpectroCoin tried to imitate practices common in fiat currency operations and, in 2015, even offered debit cards for their customers. Existing AML/CFT requirements for fiat operations were also copied and applied for the crypto business, even if it was an expensive solution:

"*Even before* [AML5] *regulation came into place, we were doing a lot of things, which we expected to be required in the future by law, just like fraud prevention. We knew that a lot of regulations come for reason. In business, a lot of things we were doing, even if it was not required by law. We did it just because it made our business stronger, because we could look better in the eyes of our business partners; sometimes it was required by a business partner, and sometimes it was just a prevention to avoid fraud.*" (Vytautas, CEO, interview)

Consequently, despite sometimes adverse environments for crypto-related business, over the first three years, SpectroCoin released a cryptocurrency brokerage service, cryptocurrency wallets (for buying, selling, sending, receiving, and storing Bitcoins), solutions for crypto payments, and debit cards. Having succeeded very well in the crypto market, the firm soon became ready for further vertical growth and started recognizing other niches in the traditional financial market.

The e-commerce business was rapidly growing, but it continued to suffer from slow traditional remittance services, which were able to proceed with an international transaction only within one to three days (Eurostat, 2015). Thus, the adoption of blockchain technologies for instant remittance in cryptocurrencies seemed to be a perfect solution:

"We noticed that the bank services were not very friendly for online business payments because when the [online clients] made a small amount of payments, usually cross-border payments, they had to be settled instantly. If, for example, you bought advertisement, you wanted to go live now, not in two or three or four days. Therefore, that is why we were looking for options to pay online fast. The cryptocurrency at the time was one of the best technological offerings for this solution. That is why we decided to build our business around crypto." (Vytautas, CEO, interview)

In addition to slow payments, traditional financial institutions were not willing to serve crypto-related businesses due to various risks, leaving an increasing number of customers who needed traditional finance market services underrepresented. Vytautas realized that such an opportunity could be captured by transitioning a firm to a licensed payment institution. When having such a firm's status, they could have gained independence from traditional banks, reducing reliance on other financial institutions whose position towards crypto might have changed at any time. Moreover, entrepreneurs would have been able to serve both traditional fiat and crypto clients.

However, Vytautas was aware that such a transition to a licensed payment institution could be challenging due to the entirely new set of processes that the business would need to adopt. Additionally, business development such as this would require SpectroCoin getting a green light from the regulator. On the one hand, serving crypto-related customers was not explicitly forbidden in Lithuania or the EU, but the EU authorities' and Lithuania's Central Bank had already warned market participants not to mix regulated and unregulated market activities (The Bank of Lithuania, 2013 December 31). Such a

warning became diluted among multiple institutional pro-blockchain/crypto-based business activities but retained the risk that regulatory position towards such businesses might soon become more adverse.

Considering the risks and opportunities, Vytautas decided to search for a smart solution that would preempt potential future risks. Instead of implementing all business goals under one SpectroCoin, he was planning to establish a second legal entity, which would act as a separate traditional financial market participant:

"*In payments' industry… competition was driven by price and speed of the payment. We always saw ourselves as being in the payments business: with SpectroCoin, we enabled a link between Bitcoin and later other cryptocurrencies and fiat. Cryptocurrency, in essence, required complying with a number of rules from technical—set by protocol—to legal—set by law. The fiat side required a relationship with a regulated financial institution, which was not guaranteed by just being compliant. The operations also depended on the views and perceptions of various stakeholders at the regulated institutions, from compliance officers to business owners. While cryptocurrency was more an exception by being distributed and having lower barriers to entry, most of the payment networks required financial licence to operate and it was a rational choice for the future of our services to make a step up and get a licence ourselves.*" (Vytautas, CEO, interview)

In February 2016, the new entity—Pervesk—was established in Lithuania to operate in the regulated financial market. In this way, the first stone in the foundation of bridging the unregulated and regulated financial industries was laid, slowly moving towards the implementation of the initial vision of becoming a digital bank that would connect the fiat and the cryptocurrency space. Next, the cofounder team submitted the licence application, and in March 2017, the Bank of Lithuania granted Pervesk the Payment Institution Licence. After receiving the licence, Pervesk was entitled to perform money remittances and debit/credit transfer services. Additionally, due to the existing advanced FinTech ecosystem in Lithuania, Pervesk gained access to the SEPA via the unique CENTROlink retail payment infrastructure operated by the Bank of Lithuania. Through this link, Pervesk had easy access to the entire EU payment area at a relatively low cost.

Being legally separate, SpectroCoin and Pervesk were connected via technological solutions, enabling the connection between the traditional and cryptocurrency markets. In this platform, SpectroCoin customers had access to cryptocurrency-related services and linked applications to the more traditional bank-type services provided by Pervesk. SpectroCoin was able to provide an opportunity for their customers to use the International Bank Account Number[3], enabling customers to quickly and easily open an IBAN account at Pervesk and use it for SpectroCoin services by linking the account to their SpectroCoin wallet. This ecosystem created the first in the world unit, which served both the regulated fiat currency and the unregulated cryptocurrency markets.

From the business development perspective, SpectroCoin conducted an upselling to their existing customer base by offering an additional set of services. When Pervesk received the licence in 2017, SpectroCoin was a well-established medium-sized brand with 500,000 registered users from the crypto community. The company had 20 employees, 3 million in sales revenue, and 0.51 million net profit (Rekvizitai.vz.lt/SpectroCoin, n.d.). Thus, a user base of 500,000 was readily available for Pervesk, as there were no other similar alternatives globally until 2018, when CoinBase received a licence and was ready to offer similar arrangements (Zuckerman, 2018). The bridging was conducted in an extremely timely manner: the cryptocurrency prices were constantly increasing (Geuder, Kinateder & Wagner, 2019), and the SpectroCoin–Pervesk tandem's services were in extremely high demand.

However, on 10 October 2017, the Central Bank of Lithuania issued an opinion on cryptocurrencies, stating: "*Financial services must be clearly dissociated from activities related with virtual currencies. Banks, payment institutions and other financial market participants should not provide services associated with virtual currencies or participate in their release*" (The Bank of Lithuania, 2017). While

[3] International Bank Account Number (IBAN) is an international number format, written in a standard and internationally recognised manner, which allows to identify an overseas bank account. IBAN is used across EU for the local and international money transfers. (European Central Bank, n.d.)

this was not an official ban, the media in the country interpreted it that way, and multiple publications with terminology indicating 'ban of crypto' started popping up: "*Bank of Lithuania bans banks from virtual currency activities*" (King, 2017). The news shook the entire crypto and BBB community in Lithuania, especially Vytautas, whose years of hard work towards bridging the two worlds was shattered in one day.

Vytautas took a deep breath and managed to gather his thoughts for a few more minutes. He continued investigating the statement issued by Lithuania's National Bank, and after several rounds of reading, one note caught his attention: "*Financial market participants that will provide financial services to customers who offer virtual currencies or are otherwise related to them will have to ensure strict compliance with the requirements for the prevention of money laundering and terrorist* financing" (The Bank of Lithuania, 2017 Oct 7). This was confusing. Can it be so that the small hope to hold on to their dream exists?

5. Addressing the power of institutions

For the last five years, Vytautas and the team were successfully navigating various formal and informal institutional pressures. They managed to find feasible ways to start an innovative cryptocurrency business within the old legal framework designed for the traditional financial market. Moreover, they found a technological solution that allowed complying with the two sets of very diverse market rules. Neither of the previous challenges stopped them from building new practices and, to some extent, creating new normative institutions. However, now, the situation felt very pessimistic.

Complying entirely with the regulatory opinion would leave Vytautas and the team with either the traditional finance or crypto business. This would mean either competing in the largely unfamiliar and concentrated market and dropping the ideals of the crypto economy grounded in decentralization and autonomy as well as the profit from the newly emerging opportunities or building business in volatile and risky crypto markets when leaving crypto-customers without the traditional banking services they need. Compliance with the regulations by shifting the entire business into the crypto-friendly jurisdiction would allow securing both types of operations but would bring immense costs: changing the location would require starting the licensing process from the very beginning and losing the first-mover advantage to the competitors. Going against regulatory opinion would entail facing negative public opinion, increased scrutiny from various regulatory institutions, and potentially a drawback to fighting the derisking challenge. In the long term, noncompliance would end up in various penalties and the withdrawal of the payment institution licence.

The nature of the cofounder's vision—to bridge regulated and unregulated financial market operations—implied that legitimization of the unregulated business part might require compliance with traditional financial market rules and norms. Blockchain-based businesses were constantly under pressure to fulfil traditional market players' demands, especially those coming from the need to know the beneficiaries and fulfil AML/CFT requirements. How could firms comply with the regulatory institution's pressure while maintaining both regulated and unregulated financial service activities? Should Vytautas engage in one more challenge and try to navigate conflicting isomorphic pressures?

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