

# BLOCKCHAIN AND TOURISM DEVELOPMENT: CASE OF MALTA

Zoran Ćirić, Associate Professor, PhD<sup>1</sup>  
Stojan Ivanišević, PhD Student<sup>2</sup>

DOI: <https://doi.org/10.31410/tmt.2018.565>

---

**Abstract:** *Over the last two years, the advent of new technology has brought about the emergence of blockchain friendly cities and tourist destinations. Various cities and countries developed technology-based solutions to serve the common good that is effective and efficient. The two cities or rather called city-states that are perceived as most blockchain friendly destinations are Malta (La Valetta) and Singapore. These two destinations widely adopted blockchain technologies and become a hub for blockchain enterprises and researchers. Accordingly, blockchain tourism has emerged over the past two years as a subset of tourism development. Malta adopted a highly positive and stimulative environment for the blockchain based companies and attracted a significant number of business entities working with blockchain followed by capital investments, business people, researchers, and experts. The objective of this paper is to identify best practices related to Malta blockchain strategy and its relationship to the sustainable tourism development in order to identify key dimensions for the sustainable growth of this sort of the tourism while highlighting key resources and challenges.*

**Keywords:** *Blockchain, tourism, Blockchain legislation, cryptocurrency, sustainable development.*

---

## 1. INTRODUCTION

Governments around the world have had policies as regards the acceptability or lack thereof of cryptocurrencies. While some countries have outright banned them, few countries have embraced cryptocurrencies and are creating an enabling environment for them to flourish. The state of Malta adapted highly friendly and progressive national legislative framework regarding the national position on blockchain and cryptocurrency in general. On all levels of government (both state and local government) initiatives to accept and endorse wide usage and acceptance of blockchain technologies and cryptocurrencies have been established. The government of Malta saw an opportunity for increased rate of development by accepting these technologies. It is important to note that we are actually referring to positive and progressive acceptance of blockchain technologies as underlying IT technology used to deliver innovative IT solutions and acceptance of Cryptocurrencies created by using these technologies as financial assets in the form of currency, securities, and other capital assets. These two separate uses of blockchain technology are used as a motor driving the change of the sustainable development of Malta. In order to attract companies which were followed by experts and researchers, government of Malta adopted legislative framework friendly toward the wide use of blockchain and created a fair financial view on the cryptocurrency usage followed by stimulative tax policy. Malta is quickly becoming a hub for digital currency activities. They have policies that greatly favor cryptocurrency exchange platforms. This is possible due to the fact that regulatory plans are being created with input from cryptocurrency stakeholders. This move is a very rare one considering the fact that in the majority of the countries, government agencies almost do not want cryptocurrency exchange platforms in their jurisdiction or are still wrapped up in bureaucracy trying to figure out how to deal with this emerging technology. The government of Malta

---

<sup>1</sup> University of Novi Sad, Faculty of Economics Subotica, Segedinski put 9-11, Subotica, Serbia

<sup>2</sup> JKP Informatika Novi Sad, Bulevar cara Lazara 3, Novi Sad, Serbia

took this brave leap of faith forward in hope to create an opportunity for the further economic development for its country. They made a legislative change that views blockchain technologies in highly favorable manner [1]. As an island country Malta lack natural resources required for the economic growth and can only seek development opportunity in increased capital income and economy of knowledge. Blockchain can be viewed as a mean to attract both capital and knowledge. The authors of this study consider Malta's adoption of both blockchain technologies and cryptocurrencies as an instrument of financial marked paved a road to increased economic growth and within it a significant increase in the influx of businessmen and researchers to Malta. The fact that Malta can be perceived as a city-state narrows down the number of variables and makes Malta perfect example for the study of the impact of blockchain technology adoption on sustainable tourism growth.

## 2. THE SUSTAINABLE TOURISM DEVELOPMENT

The travel and tourism industry is placed among the largest industries in the world. However, the degrading effects of tourism have become a big concern and need to be addressed quickly. With this in mind, the concept of sustainable tourism has emerged with the aim of reducing the negative effects of tourism activities, which has become almost universally accepted as a desirable and politically appropriate approach to tourism development [2]. Over the last two decades, the concept of sustainable tourism development has become almost universally accepted as a desirable and politically appropriate approach to tourism development [3].

The tourism industry should be encouraged to embrace 'clean green' tourism, which means that firms should do their best to decrease the environmental impacts of their operations. If a destination is to achieve sustainable tourism development, then the actions of its constituent firms must be consistent with and support this objective. Dwyer and colleagues in a study stated that tourism firms should adopt a Triple Bottom Line (TBL) approach to sustainable development to ensure that firms integrate social, environmental and economic information into managerial decision-making. Firms must aim to achieve sustainability in their operations if the destination as a whole is to conform to sustainability principles [4]. The predominant view of the scientific community is that the tourism industry has a long way to go in order to achieve sustainable development. There are various interpretations of the reasons for the slow progress toward the sustainability, however, it may be concluded that the actors in the tourism sector pursue sustainability only to meet the regulatory demands and not because of the market reasons. Further development of the sustainable tourism should include the role of tourism in the expansion of protected areas; improvement in environmental accounting techniques; and the effects of individual perceptions of responsibility in addressing climate change [5].

Some authors consider that sustainable development in tourism is multidimensional because of the extensive impact of economic, social and environmental dimensions. Tourism is a substantial global system that both impacts the environment and is impacted upon by the environment. As such, tourism must address the challenges of environmental conservation in all aspects of the system. This requires a system-wide approach to environmental issues based on an understanding of the complexity of the tourism system and the interrelated nature of its components. The social, economic and environmental dimensions are very extensive and it seems that sustainability in tourism is multi-dimensional. The essence of sustainability and sustainable development is that they are dynamic. Developments should be considered in different aspects and perspectives of the dynamic framework of sustainability [6]. These authors state that their

extensive scientific literature created a concept that can help countries attempting to create sustainable tourism development. “Concept and application of this new perspective in tourism is developed in many countries and the presented literature would play a key role not only in having a healthy and sustainable tourism industry but also in the economic growth of countries and their present and future stakeholders” [6]. In the case of Malta, the attempt to spark the economic development can be viewed as smart tourism. Smart tourism would imply: “These include applications that are oriented towards serving tourists which enable access to products and support services including the use of the payment system and interfaces; telecommunication devices and interfaces; wireless connections that include hotspots and other such services, and the like” [7].

Precise definition of ‘sustainability’, which implies the significant role of states in preparing a steady progress in life conditions for generations to come: ‘sustainable development’ is more process-oriented and associated with managed changes that cause improvement in conditions for those involved in such development, and ‘sustainable tourism’ is defined as all types of tourism that are compatible with or contribute to sustainable development. ‘Sustainable tourism’ requires both the sustainable growth of tourism’s contribution to the economy and society and the sustainable use of resources and the environment, which will be gained by a deep understanding and proper management of tourism demand defined tourism development as a dynamic process of matching tourism resources to the demands and preferences of actual or potential tourists [8].

### 3. BLOCKCHAIN TECHNOLOGIES

Blockchain technology was first detailed in a white paper released in 2008 by an individual (or a group of individuals) using the pseudonym ‘Satoshi Nakamoto’s; white paper ‘Bitcoin: A Peer-to-Peer Electronic Cash System’ detailed an innovative digital currency system which would allow payments to be transferred directly, without an intermediary (peer-to-peer) [9].

In a world filled with emerging technologies, ‘Blockchain technology’ (often colloquially referred to as ‘Blockchain’) is arguably one of the most exciting, being labeled as ‘disruptive’ and ‘innovative’ by many [10]. Despite often being associated only with Bitcoin and other cryptocurrencies, the underlying technology – the digitally distributed public ledger – ‘Blockchain’ has been receiving attention from a variety of industries. The concept of recording transactions in a secure, stable, chronological and scalable way, has led to possible applications in many areas.

The blockchain technologies can be used for: currency, payment infrastructure, smart contracts, digital assets, identify, verifiable data, file storage, voting, etc. In a single sentence, blockchain can be defined as a digitally distributed ledger for transactions. The ledger can store information on possessions, inventory, money, and anything that can be transacted. The ledger (decentralized database) is kept and maintained on a distributed set of computers that are able to communicate with one another. The replicated ledger is synchronized over the Internet and made readable to anyone on the network. If the Blockchain is public (and permissionless) then anybody in the world can access the network as long as they have a device and an Internet connection. Data about the transactions that take place is electronically arranged and stored in cryptographically protected fixed structures or ‘batches’ known as blocks. These blocks use cryptographic validation techniques, linking the blocks together and forming a linear, chronological chain (hence the name ‘Blockchain’).

The blocks identify each other by using a hashing function to draw upon the previous block in the chain. Every transaction in the history of time is on the Blockchain (and all blocks are linked together). The blocks are timestamped, and the chain is updated continuously on every ledger on every node. Hacking the decentralized Blockchain is thought to be near-impossible since every block, on every machine, would need to be changed. This is why transactions are seen as reliable and secure. Blocks have a header and content. The header includes a block reference number (unique), the timestamp, and a link back to the previous block. The content is a validated list of the assets (e.g. bitcoins). The ‘blocksize’, the amount of the transaction, and the addresses of those involved in the transaction are also included [10].

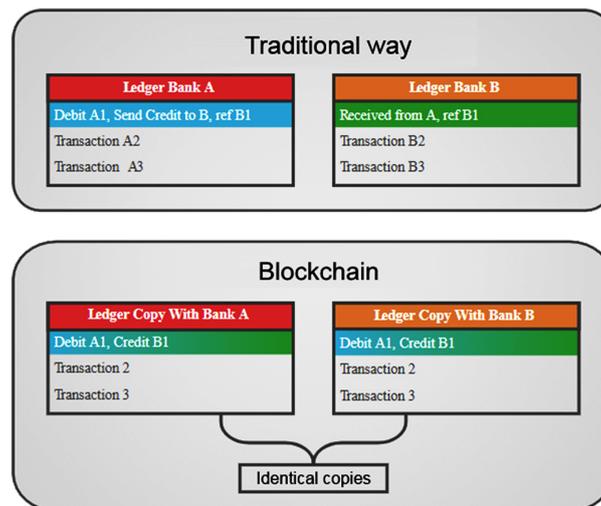


Figure 1. The difference in transaction processing between the distributed ledger and traditional database storage  
Source: <https://academy.b9lab.com/>

### 3.1 Types of Blockchain

**Public** – A Blockchain that anyone in the world can access and use – often denoted to as a ‘permissionless’ Blockchain. Participants can read the ledger, send transactions, and be part of the consensus process. There is usually little (or no pre-existing) trust between participants. However, using cryptography, consensus mechanisms, and possibly incentives, the Blockchain can be seen as secure and trustworthy. As a result, central authorities are not needed [11].

**Hybrid/Consortium** – A Blockchain where the consensus process is controlled by pre-selected nodes. Pre-existing trust normally exists to some extent. The most widely adopted and a classic example of such a protocol is Ethereum network [12].

**Fully Private** – A Blockchain where write permissions are kept centralized to one organization – similar to a database (but with cryptographic audibility). Read permissions can be public or restricted. Use cases could include auditing purposes or simply a more secure database management system. One of the examples of such blockchain protocol is Hyperledger [13].

Difference between blockchain protocol types is significant. The type of the blockchain determines its nature. Every type has his own advantages and disadvantages. The main advantage of a public blockchain is resistance to censorship. Public blockchains can’t simply be taken

‘offline’, and developers have a way of saying ‘I have no power to do this, even if I tried’. Eric Larchevêque, CEO of Ledger (a Blockchain solution provider) believes “public Blockchains with censorship resistance have the potential to disrupt society” whereas “private Blockchains are merely a cost-efficiency tool for banking back offices” [14]. The advantages of private blockchains are: Flexibility, Known validators, smaller nodes, shorter block creation time, cryptocurrency is not needed for fuel, etc.

### 3.2 Blockchain application

The blockchain technologies can be used by international institutions, governments, companies, and individuals. As previously stated by some authors there are 8 segmented applications of blockchain technologies. If a country intends to use blockchain technologies the following areas should be legislatively regulated: the use of the blockchain technology itself, the use and acceptance of cryptocurrency and other blockchain derivatives such as security tokens as instruments of the financial market, the tax policy regarding the blockchain and cryptocurrency assets.

#### Blockchain in the public sector, as of March 2017

Blockchain experiments in the public sector are accelerating globally, with a concentration in the US and Europe.

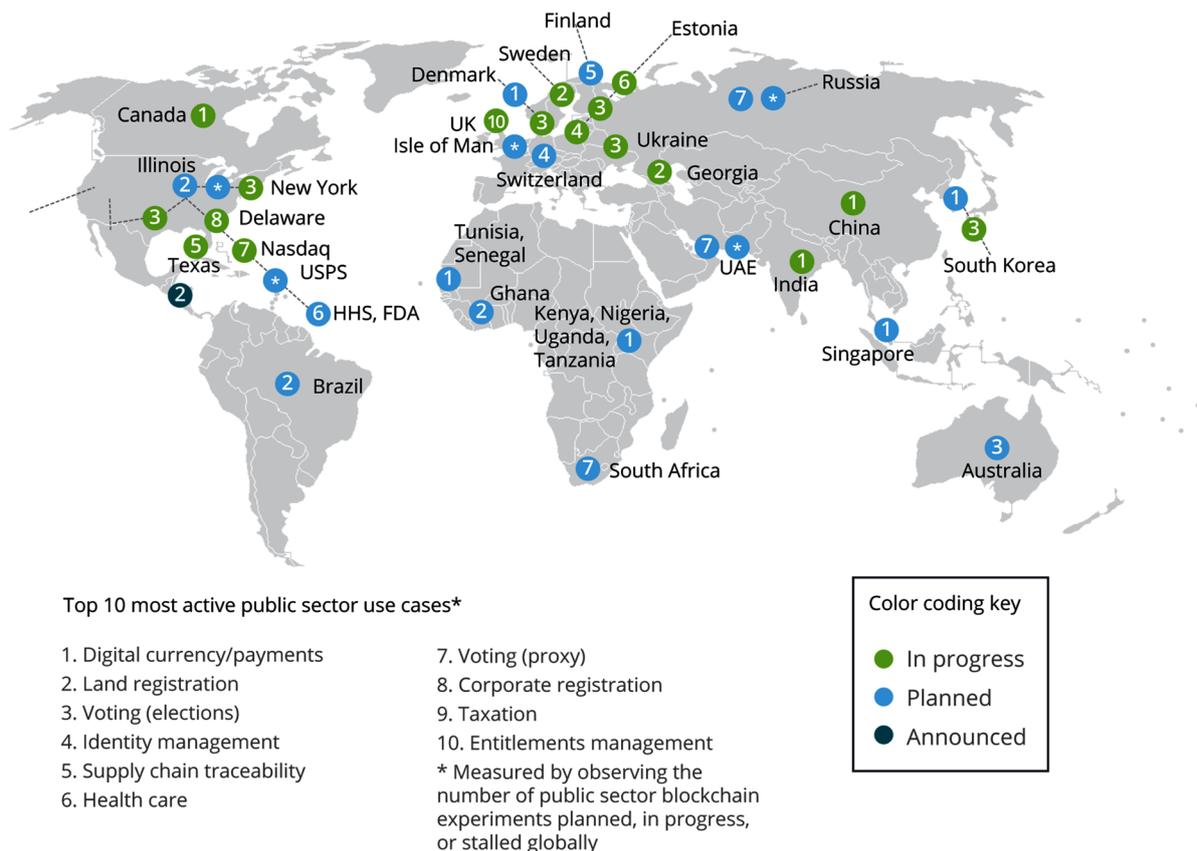


Figure 2. The list of countries that are implementing blockchain projects

Source: deloitte.com

“There is no doubt that all countries in the world will have to be determined against this technology. The banning of traffic and the use of crypto pods (1) must not, and probably (2) cannot, while certainly (3) should not be followed by the prohibition of the use of these technologies, because, as shown in this paper, they have many advantages.

Accordingly, from the national economy level, there are two segments in which the state should adopt these technologies. The first - the state should support and encourage the use of these technologies in its information systems in order to be the backbone and engine of development and use of these technologies in the real sector. Acceptance of these technologies does not necessarily have to be accompanied by the adoption of legislation that allows the use of cryptocurrency in financial operations inside and outside the country. The second segment would be the acceptance and legislative editing of cryptids as means of payment within and outside the country. The amendment of the legislation should include a new set of laws that would apply to the use of technologies and the modification of existing laws governing banking operations and fiscal and monetary policy, as well as the laws governing accounting practice. Within the framework of fiscal policy, it is necessary to regulate the tax treatment of crypts while in the monetary policy it is necessary to determine the modality of exchange of crypts for money.

Acceptance of the second segment carries with it many risks and new challenges, but it also brings many advantages” [11].

#### **4. MALTA ADOPTION OF BLOCKCHAIN TECHNOLOGY**

The scientific literature is scarce on this subject, which is one of the reasons for conducting this study in the first place. Only one scientific paper regarding this subject was found. This article researched the very ability to use blockchain as a turning point for the tourism development by small island economies. This paper stated that the rise of blockchain technology could radically disrupt the global economy. As an emergent technology, blockchain is of broad and current interest in the tourism industry. Small island economies are at the forefront of adopting this digital asset and technology. For instance, the Caribbean economies are launching their first digital legal tender, and Aruba is developing a blockchain platform to boost tourism revenue.

Given the velocity of adoption, blockchain technology holds significant implications for tourism development. This research letter provides a discourse on the adoption of blockchain technology among small island economies concerning the opportunities and potential challenges faced and offers practical implications for tourism stakeholders [15]. With this in mind, Government of Malta evidently looks favorably upon Blockchain-based businesses and is dynamically seeking to produce a workable regulatory framework to further promote this industry and to become a pioneer in regulating DLT and Blockchain technology.

Malta makes use of its strategic geographical position, weather conditions, strong skills base, and entrepreneurial spirit to serve as a test-bed for new sectors and foreign firms to test their new technology and products locally. Marking themselves as world-leaders within this industry, Malta Blockchain hopes to revolutionize the perspective governments will adopt towards such innovative technologies [16]. Unlike many other countries trying to put a sledgehammer on cryptocurrencies, the Maltese government is doing the direct opposite. It is opening wide its arms to cryptocurrency exchange platforms and creating an enabling environment for them to flourish. While other authorities have chosen to regulate Blockchain-related operations in a disorganized fashion, focusing only on the areas that the respective governments/states consider to be of significance (predominantly taxation or money laundering), the Maltese Government is considering a holistic, all-encompassing regulatory approach to fashioning the most attractive environment for Blockchain start-ups to choose Malta as their base. Evidently, the recent announcement by cryptocurrency exchange Finance (the largest cryptocurrency in the world in

terms of volume) is proof that Malta is indeed becoming a melting pot for Blockchain businesses, start-ups and industry giants alike. The greatest challenge to make Malta the jurisdiction of choice for Blockchain-based businesses, therefore, rests in any proposed regulatory framework not falling prey to over-regulation. The test for local policymakers and regulators will be the development of a regulatory system which addresses the primary policy concerns of Blockchain technologies (such as money laundering and illicit activities), without restricting the benefits which the new technology and its various applications should provide to legitimate users, including companies and the government itself [17].

The government of Malta adopted three bills –numbered 43, 44, 45– titled “The Innovative Technology Arrangements and Services Act,” “The Virtual Financial Assets Act,” and “The Malta Digital Innovation Authority Act,” respectively [18], [19], [20]. This bill was made in a place with the expectation to help guide the Maltese government on how to better embrace blockchain and achieve its aim of becoming an international crypto business hub. Bill 45, for example, will see the creation of the Malta Digital Innovation Authority, which will primarily be in charge of promoting and developing the blockchain industry in Malta [21]. “Blockchain has the potential to create new foundations for global economic and social systems rather than be a disruptive force towards traditional business models,” said Mr. Frank V. Farrugia President of the Malta Chamber of Commerce, Enterprise and Industry as he was addressing ‘Blockchain – The New Regulatory Framework’. “Blockchains promise to provide corporations with efficiencies in global supply chains, financial transactions, asset ledgers, and decentralized social networks” [22]. In a press conference at MITA’s Data Centre, Honorable Parliamentary Secretary Dr. Silvio Schembri explained that in the budget for the coming year, Government will be providing all the tools necessary for economic growth, while encouraging the use of new technologies.

These changes will not only affect citizens’ lives, but also the way businesses work. Among these changes, there is the development of blockchain technology, which will change radically how transactions are made. Many sectors will be affected by this change and Malta wants to invest in such a technology. While referring to the Global Competitiveness Report 2017-2018 published by the World Economic Forum, Dr. Schembri said that Malta placed among the best jurisdictions of the world for financial services, because it distinguished itself in auditing and reports because of the robust banking sector [23]. Within the European Union, Malta is ahead of the curve in establishing a legislative framework for blockchain, though it’s not the first European nation to embrace it. Lithuania is also becoming a cryptocurrency hub, and Estonia was close to introducing a national digital currency called Estacoin. Outside of the EU, Switzerland has designated its canton of Zug as a „Crypto Valley” [24].

## 5. THE EFFECTS OF BLOCKCHAIN ADOPTION IN MALTA

While countries like China, South Korea, and the US have created unfriendly atmospheres for cryptocurrencies, Malta is striving to set itself to be a crypto hub. Its regulations, unlike any other, benefit crypto companies. The little Island, who is a member of the European Union, has decided to stand out in the cryptocurrency world. Strict regulations and outright bans from other countries have pushed blockchain-based companies to seek for friendlier places to call home. With the continuous crackdowns going on in other countries, it might continue to drive more crypto players into the country. With the influx of these players and the Prime Minister’s progressive stance on cryptocurrency, Malta might just become the crypto hub and the world’s

Blockchain Island [25]. President of Malta’s Chamber of commerce Dr Silvio Schembri also revealed that there are 10 companies who are willing to relocate their insurance business to Malta. In fact, he explained that the regulator has already received five applications and is expecting the next five applications in the coming weeks [26]. With tax rates as low as 5 percent, the government recently passed laws that seek to ease the trading and issuance of cryptocurrencies. Malta’s stock exchange is also in talks with companies to list digital assets.

The aggressive steps to become one of the world’s friendliest jurisdictions in the industry appear to be working. Crypto exchange Finance, founded last year in Hong Kong and now one of the largest, said in March that it’s moving to Malta after regulators in Asia cracked down on virtual money. The island is capturing an outsize share of crypto trading, according to research from Morgan Stanley, while Finance is working with other investors to create Founders Bank - an institution servicing digital clients registered in the island [27]. “The majority of cryptocurrency trading volumes operate out of companies legally located in Malta” [28].

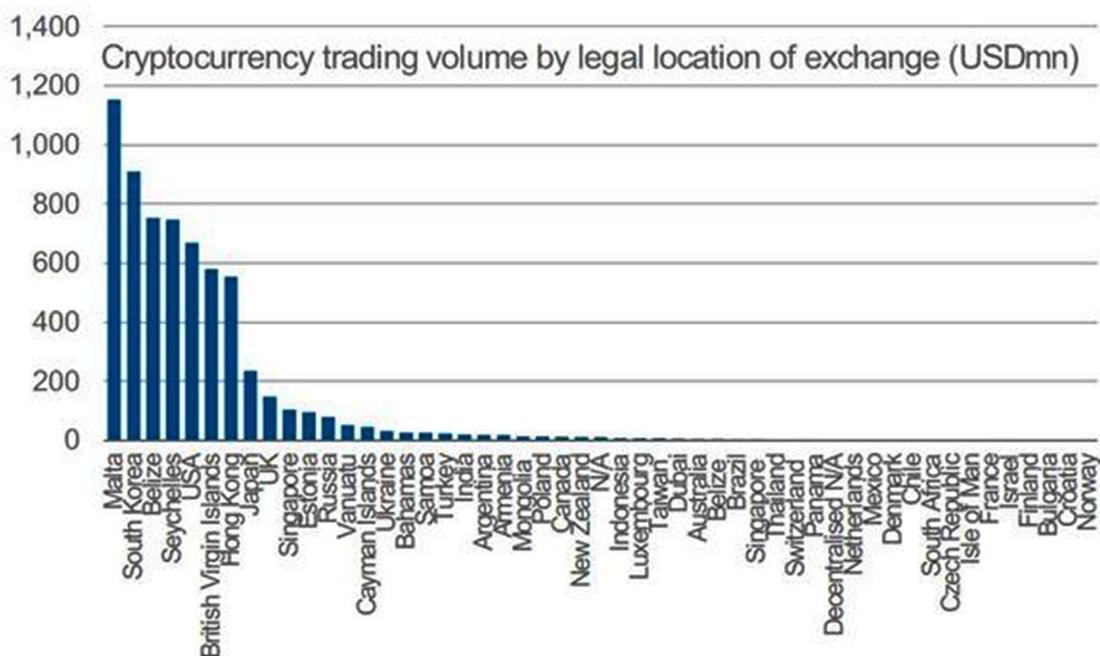


Figure 3. Cryptocurrency trading volume in USD mn by country  
 Source: Morgan Stanley research from coinmarketcap.com

Movement of other fintech companies to Malta was also a leader on the example of insurance companies. The Gross Value Added from the financial services continued to grow in the last five years, such that it amounted to €598 million in 2016. At the same time, this sector managed to attract a lot of investments from foreign countries and provided more employment. In fact, today there are more than 10,000 people working in this pillar of our country’s economy. Growth was mostly recorded in the insurance and pensions sector where in September there were 51 schemes being offered. In this sector, Government has developed an important legislation which makes it easier for companies to relocate to Malta which is also an example of proactive legislation favoring sustainable development. The innovative drive has made the island appealing for fintech companies, as well. Binance, the world’s largest cryptocurrency exchange, recently moved its headquarters from Hong Kong to Malta, following regulatory obstacles in the Far East. And plans are currently underway for Malta to be the home of the world’s first de-

centralized bank. Founders Bank won't have any central authority. Instead, it will be community-owned by all its customers. Binance is backing the bank, serving as one of its first investors. „If successfully implemented, the concept will certainly enhance the blockchain ecosystem within the Maltese jurisdiction” [29].

The influx of companies, investors, experts, and researchers also followed this movement. Malta held two large Blockchain summits that attracted thousands of delegates to descend on the Intercontinental Hotel in St Julian's in droves for the Malta Blockchain Summit. According to unofficial estimates, the attendance was close to the 8,500 marks and there is talk that next year's event (which has already been confirmed) will take place at a much larger venue [30].

**Tourist movement: Malta may soon become a hub of Bitcoin activity now that tourists are requesting to visit the country while only using Bitcoin. Encouraging this transition is a new travel agency called Bitcoin Adventures, a company dedicated to organizing trips in Malta for Bitcoiners [31].**

#### 4. CONCLUSION, REFLECTION AND FURTHER STUDY

The government of Malta has provided a legislative framework that created a favorable environment for cryptocurrencies and blockchain startups to flourish. Its policies have attracted massive cryptocurrency exchange platforms. The country is seeking to become one of the world's friendliest authorities for the cryptocurrency sector. What other governments viewed as a threat Malta viewed as a development opportunity. The Maltese government regulatory framework will cover different market actors and institutions such as crypto traders, asset management, and exchange platforms. This would make it the most comprehensive crypto regulated framework in the industry. The favorable and innovative approach attracted fintech giants such as Binance, OKEx, TRON, Monaco, and others to move their business to Malta or at least accept Malta as one of the top choices for their enterprise.

The Movement of Binance had a significant impact on the Malta economic growth and it was a signal for others to join the movement since the Binance is the world's leading cryptocurrency exchange. As a result, Malta is now ranked as a 1<sup>st</sup> country by the amount of trading volume of cryptocurrencies. This movement also attracted other fintech startups. The government of Malta recognized this and seized this opportunity with some additional legislative incentives that made tax rate on capital income from crypto trading only 5% and an initiative that facilitated easier relocation of companies to Malta. The relocation of companies difficulty is still being criticized but the improvement has been made.

Based on Malta's example the following cornerstones of the legislative framework that lead to sustainable development and sustainable tourism as its important segment:

1. Law on innovative technologies: The Innovative Technology Arrangements and Services Act”,
2. Law on blockchain “The Virtual Financial Assets Act”,
3. Establishment of a national authority with the “The Malta Digital Innovation Authority Act”,
4. Lowering the capital tax applied to virtual assets,
5. Simplifying company relocation procedures.

In our opinion, these legislative documents, laws, only represent a manifestation of the will to establish a broader blockchain acceptance framework that can lead to the increased economic development and tourism development as its segment. None than less these manifestations represent cornerstones of this framework that can be applied to other countries' regions and cities. However, the limiting factor is that Malta gained a competitive advantage by differentiating itself from countries that had a restrictive policy on the blockchain, therefore further such attempts form destinations will suffer effects of marginal utility. Because of this Malta established itself a leader and its position as 1<sup>st</sup> blockchain destinations for companies and individuals that will hardly be challenged. Another important regard is to state that Malta new economic growth predominantly comes from the adoption of cryptocurrencies and other virtual assets for use in the financial sector instead of innovations created from application of the technology itself.

The subject of further research should be primarily the analogy of this study applied to other city-states, predominantly Singapore followed by Dubai and other leaders in the adoption of blockchain technologies, to widen the framework and to compare the effects before unified framework can be formulated. The city states are selected because factors are more clearly visible.

As a reflection of this work, the authors have to state the limitations of the lack of scientific literature which was compensated by the novel economic researches conducted by leading economics authorities such as Deloitte, Bloomberg, Forbes, etc. The authors of this paper hope that it will shed some light on this and help the further study on this subject.

## REFERENCES

- [1] [https://meae.gov.mt/en/Public\\_Consultations/OPM/Documents/PS%20FSDEI%20-%20DLT%20Regulation%20Document%20output.pdf](https://meae.gov.mt/en/Public_Consultations/OPM/Documents/PS%20FSDEI%20-%20DLT%20Regulation%20Document%20output.pdf)
- [2] Sharpley, R. (2003). *Rural tourism and sustainability – A Critique*. In D. Hall, L. Roberts, & M. Mitchell (Eds.), *New directions in rural tourism* (pp. 38–53). Aldershot: Ashgate Publishing Limited.
- [3] Pulido-Fernandez, J., & Lopez-Sanchez, Y. (2016). *Are Tourists Really Willing to Pay More for Sustainable Destinations?* *Sustainability*, 8(12), 1240. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/su8121240>
- [4] Dwyer, L., Edwards, D., Mistilis, N., Roman, C., Scott, N. (2009). *Destination and Enterprise Management for a Tourism Future*. *Tourism Management*, 30(1), 63-74. DOI: 10.1016/j.tourman.2008.04.002
- [5] Buckley, R. (2012) *Sustainable tourism: Research and reality*, *Annals of Tourism Research*, Volume 39, Issue 2, 2012, pp. 528-546
- [6] Zolfani, S.H., Sedaghat, M., Maknoon, R., Zavadskas, E.K., (2015) *Sustainable tourism: a comprehensive literature review on frameworks and applications*, *Economic Research-Ekonomska Istraživanja*, 28:1,1-30, DOI: 10.1080/1331677X.2014.995895
- [7] Khan, M., Woo, M., Nam, K., Chathoth, P. (2017). *Smart City and Smart Tourism: A Case of Dubai*. *Sustainability*, 9(12), 2279. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/su9122279>
- [8] Liu, C. H., Tzeng, G. H., Lee, M. H., & Lee, P. Y. (2013) *Improving metro–airport connection service for tourism development: Using hybrid MCDM models*, *Tourism Management Perspectives*, 6, 95–107.
- [9] Nakamoto, S. (2008) „*Bitcoin: A Peer-to-Peer Electronic Cash System*”, Bitcoin.org, 2008.

- [Online]. Available: <https://bitcoin.org/bitcoin.pdf>.
- [10] „Blockchain reaction: Tech companies plan for critical mass”, EY, 2016. [Online]. Available: [http://www.ey.com/Publication/vwLUAssets/ey-blockchain-reaction-tech-companies-plan-for-critical-mass/\\$FILE/ey-blockchain-reaction.pdf](http://www.ey.com/Publication/vwLUAssets/ey-blockchain-reaction-tech-companies-plan-for-critical-mass/$FILE/ey-blockchain-reaction.pdf)
- [11] Ivanišević, S., Ćirić, I., Ćirić, Z., (2017) *Unapređenja poslovanja u realnom i državnom sektoru kroz upotrebu „blockchain“ tehnologija*, Naučni skup „Strategije razvoja i ekonomske saradnje malih zemalja u uslovima globalizacije i regionalnih integracija”, Akademija nauka i umjetnosti Republike Srpske (ANURS) i Srpska akademije nauka i umetnosti.
- [12] <https://www.ethereum.org/>
- [13] <https://www.hyperledger.org/>
- [14] O’Connell, J. (2016) *What Are the Use Cases for Private Blockchains? The Experts Weigh In*, Bitcoin Magazine, 2016. [Online]. Available: <https://bitcoinmagazine.com/articles/what-are-the-use-cases-for-private-blockchains-the-experts-weigh-in-1466440884/>.
- [15] Andrei O. J. Kwok & Sharon G. M. Koh (2018) Is blockchain technology a watershed for tourism development? *Current Issues in Tourism*, DOI: 10.1080/13683500.2018.1513460
- [16] <https://www.ccmalta.com/news/malta-blockchain?lang=hu-HU>
- [17] <https://www.maltachamber.org.mt/en/malta-the-jurisdiction-of-choice-for-blockchain-businesses>
- [18] <https://parlament.mt/media/94207/bill-43-innovative-technology-arrangements-and-services-bill.pdf>
- [19] <https://parlament.mt/media/94209/bill-44-virtual-financial-assets-bill.pdf>
- [20] <https://parlament.mt/media/94210/bill-45-malta-digital-innovation-authority-bill.pdf>
- [21] <https://www.coindesk.com/malta-passes-three-bills-on-blockchain-and-crypto-assets>
- [22] <https://www.maltachamber.org.mt/en/blockchain-the-new-regulatory-framework>
- [23] <https://www.mita.gov.mt/en/News/Pages/2017/Malta-aspiring-to-be-at-the-forefront-in-regulating-blockchain.aspx>
- [24] <https://money.cnn.com/2018/07/18/technology/startups/malta-blockchain/index.html>
- [25] <https://blockonomi.com/malta-blockchain-island/>
- [26] <https://www.mita.gov.mt/en/News/Pages/2017/Malta-aspiring-to-be-at-the-forefront-in-regulating-blockchain.aspx>
- [27] <https://www.bloomberg.com/news/articles/2018-09-10/blockchain-island-dream-is-calculated-risk-says-malta-leader>
- [28] <https://www.bloomberg.com/news/articles/2018-04-25/most-cryptocurrency-trading-is-moving-to-malta-at-least-legally>
- [29] <https://money.cnn.com/2018/07/18/technology/startups/malta-blockchain/index.html>
- [30] <https://www.forbes.com/sites/sap/2018/11/15/how-to-create-a-people-first-culture-in-the-digital-age/#2716dceac4a9>
- [31] <https://bitsonline.com/tourism-industry-malta-bitcoin>