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Does Blockchain Technology Facilitate the Tax System in the Era of Industry 4.0?

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Contents

Abstract: *The use of blockchain technology in the tax system is quite new and has not been studied so far in the context of developing nations. The study explores how blockchain technology can be applied to the indirect tax system of a developing country, specifically for electronic invoices. A sample of seven employees who were from different fields such as the Federal Board of Revenue (FBR), Institute of Charted Accountants of Pakistan (ICAP), private institutions and the commerce department were interviewed. Results revealed that Blockchain technology can be used to distribute safe tax data, such as the Tax invoices serial numbers, which will make submitting the Tax invoices serial numbers more efficient and faster. In addition, the Tax invoices' serial numbers transactions can be tracked and analyzed. government meant must pay attention to the peculiarities of blockchain technology while undertaking a design linked to the implementation of blockchain technology in tax systems.*

Key Words: Blockchain, Tax System, Developing Countries, Industry 4.0, Pakistan etc

Introduction

A blockchain is made up of several sets of blocks joined and a series of links that form a chain (Manav, 2017). Each block identifies the block that came before it by using a hash function to create a single unbroken string (Bambara et al., 2018). It is extremely difficult to erase or modify data that has already been saved in the blockchain database (Laurence, 2019). An assigned ledger is a decentralized, allocated ledger system used by blockchain. An assigned log is a file that contains all of a community's transactions and may be accessed using all of the community's events (Schenk, 1989). As a result, in a blockchain community, there is no administrative centre that oversees statistics.

Before going any further with blockchain, four key principles must be grasped (Setyowati et al., 2020). Firstly shared ledger is a record of all events in a blockchain system that is accessible to all participants in the network (Manav, 2017). The shared ledger records all transactions from start to finish since it is unchangeable. Transaction data is only recorded once in a shared ledger, after which it is sent to all or any participants on the blockchain network, ensuring that they all have a duplicate with the same information. Be a result, a shared ledger is sometimes referred to as a recordkeeping system. It acts as a trustee within the blockchain network. Secondly,

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Permissions grant access to non-public blockchain networks to parties who choose to participate. On the blockchain, there are two types of networks: public (permitted) and private (permission). Permission blockchain causes each participant should have a distinct identification distinct from the others. The identification permits each member to join the blockchain system and then view previous work (Manav, 2017). As a result, the permission blockchain makes the information and accuracy verification a lot more of a priority and efficient. The efficiency is accomplished since transaction information is not readily available confined small number of people. In contrast to a permissionless blockchain, each network participant has access to all the fine print of the network's transactions. The working details published on the private blockchain are short to increase security and protect anonymity. Thirdly, Smart contracts, are used as part of a transaction saved and killed manually within the blockchain. In the actual world, rational agreements are effectively the same as a traditional contract written on paper. Its most significant smart contracts, on the other hand, are different electronic. A system will be developed with the help of smart contracts that will be more secure than a standard paper contract. (Laurence, 2019). When smart contracts are stored on the blockchain; all of the contract's statements are transmitted to all parties on the network. There is no need for a third-party assessment if there are terms that contravene the contract. This means that using sensible contracts on the blockchain network removes the need for a third-party intermediary. Sensible contracts are trusted since they require several immutable and distributable qualities. Immutable refers to the fact that they are immutable and the term distributable refers to the contracts' contents would be transmitted to everyone or any individuals within the network of blockchain technology, making them instantaneously valid (Mikhaylov, 2020). Lastly, a Consensus is a data validation agreement reached by all stakeholders in a very large blockchain network. Knowledge replication and distribution necessitate that each node must validate the information within the block before the blockchain network is updated; agreement disregards the involvement of third-party in the blockchain network operation (Wijaya and Darmawan, 2017). This demonstrates that the production of blockchain is secure, verifiable, and validated. This generation is substantially less vulnerable to fraud due to the consensus process employed in the blockchain.

Blockchain Technology in Pakistan

Blockchain has emerged as significant technological advancement with the ability to alleviate global challenges. It's past time for Asian nations to take the lead in developing this new technology. Blockchain has the potential to improve the country's economic structure. Every blockchain and cryptocurrency must be compelled to be regulated, and proper implementation must be carried out (Batada, 2020). Pakistan legalized the usage of blockchain technology in the year 2020, which was a positive step forward. The decision was made to attract remittances. Remittances increased by 13% in the first quarter as a result of this. Imran Khan, the Prime Minister of Pakistan, announced a multibillion-rupee economic package for pandemic-affected areas. Such situations necessitate a high level of openness, which may presumably be attained through the use of blockchain. Blockchain can revolutionize how government agencies handle their most sensitive information. The increased level of security ensures a greater level of public trust and collaboration with the pure system.

Blockchain and Tax System

With the Blockchain-based automatic tax regime, compliance with tax can be improved because the authorities have access to all wallets and can track the flow of money. Furthermore, the tax network will reach a larger number of people and will be enlarged. Tax collection could be raised in this instance. Because more people will be taxed as a result of the growth of the tax network, the tax burden for each taxpayer will be reduced for the government meant to fulfill its tax

potential, and each individual will pay less tax. As a result, disposable personal income and savings are increased. However, the use of blockchain in tax transactions has started to attract worldwide attention (Demirhan, 2019, Hossain et al., 2020). Technology is Because of this, it is planned to be adopted in the United Arab Emirates for the reduction of taxation errors and tax compliance. The UK Tax Office has been working on incorporating this technology into the tax system since 2020 (Ajienka, 2017).

To speed up reporting and reduce counterfeiting, Italy implemented an e-invoice tax scheme on January 1, 2017. The data of tax invoices will be given electronically (Asquith, 2016). China, on the other hand, indicated that it will use blockchain in its tax system until 2023. European Commission reported tax shortfall in 2014 is € 160 billion. This shortfall has been linked to tax evasion. Tax authorities will be able to generate accurate estimates for future tax revenue thanks to the use of blockchain (Ajienka, 2017).To encourage the usage of blockchain, the US state of Nevada designated blockchain as a digital form of registration in 2017 and declared the use or obstruction of blockchain to be illegal under The Uniform Electronic Transactions Act (UETA), a federal law that regulates. The information and transactions received through the blockchain will also be covered under the scope of jurisdiction, according to the statement. The Blockchain era's utility in a variety of tax types could be enhanced (Wijaya et al., 2017).

There is a lack of research on the implementation of blockchain in a tax system where indirect taxes are collected, particularly in the context of an emerging economy. Our study contributes to the literature on the implementation of blockchain technology in an indirect tax system that was overlooked by prior studies (Cho et al., 2021, Demirhan, 2019, Hossain et al., 2020, Ainsworth and Shact, 2016, Das et al., 2022, Faccia and Mosteanu, 2019b, Gaie and Mueck, 2022, Pasha et al., 2022, Setyowati et al., 2020). The contribution supports the implementation of blockchain on public data. Furthermore, as the tax is a source of revenue for the Govt. there is a dire demand for the Pakistani tax system to shift to a blockchain-based model. Following are the research question:

Research Questions

Following are the research questions that will be explored in this research paper:

- How electronic invoices of indirect taxes can be managed with the help of blockchain in Pakistan?
- Is it safe to distribute data of tax invoices serial numbers to the nodes in the blockchain technology network?
- How efficiency and speed of the TISN system, with the help of blockchain technology can, be improved?

Literature Review

Satoshi Nakamoto coined the term "blockchain technology" for the first time. In 2008, a peer-to-peer electronic nodes system was published. Crypto cash's generation factor is a chain of cryptographically chained blocks of information. On a web page uploaded to the Cryptography Mailing List, he mentioned Bitcoin contracts. He was the driving force behind the development of Bit currency, authoring articles about it till 2010 (Freeman, 2022). He was the first to present dispersed information storage in the form of a chain of blocks, which became the inspiration for the bit-coin blockchain. A blockchain network is a system in which each money transaction is recorded. Apart from banking, blockchain mechanization can be employed as a high-rise security system in a variety of fields (Yayman, 2021).

A supportive system and a comprehensive government assistance mechanism are required for the successful integration of blockchain-based full solutions. This needs to assist in the broad adoption of blockchain technology and the establishment of regular requirements, which include criminal identification and the understanding of taxation and accounting impacts at the time of reservation (Pwc, 2017). Government institutions in several nations are now heavily

utilizing blockchain technology as it is directly tied to network organizations, unlike other technologies (Jun, 2018).

Individuals and businesses are refusing to pay fees and taxes alternative payments due to state government budgets in whole or in part. Depending on how the fraud is committed, tax evasion is classified as legal, dishonorable (illegal) tax evasion, customs evasion, cloaked tax evasion, short fraud, phoenix syndrome - or long-term, calculated tax fraud; multiple firms syndromes; insignificant manipulations; underground tax economy, and tax havens (Pwc, 2017).In most nations around the world, these sorts of tax evasion are met to varying degrees. Tax evasion and minimization are widely acknowledged as serious issues. Computer science will be acclimated to dominate tax fraud through its new technology, Blockchain (Cho et al., 2021). Furthermore, using the permission Blockchain, completely different roles could be given completely distinct knowledge views, limiting data gaining access to some (MOŞTEANU, 2011). Triple-entry accounting systems may be configured to meet accounting rules and laws mechanically using good contracts and can even amend tax filings through continual updates, thanks to Blockchain (Faccia and Mosteanu, 2019a). The digital revolution has changed, and the continued progress of digital technology has a significant impact (Jain, 2019).

Effect of Blockchain on Individual Taxes and Tax Collection/administration Systems

The proper application of blockchain for taxation isn't limited to the existing space and needs to take into account every aspect of government activities. Besides integrating Computer networks on differing levels, it is indeed clear that deploying blockchain would demand serious constitutional reforms, such as modifications to databases, material possession, and legal identity regulations. Conversely, the advantages of Blockchain network technology for governmentment are difficult to overlook. For both small and large firms, blockchain will be a driving issue in adopting real-time, machine-driven tax processes in the long run (Ledger Insights, 2019)

Blockchain can help with compliance while also giving tax authorities visibility into microtransactions. As a result, it may be able to help reduce the tax deficit (Pwc, 2017). Cutting-edge blockchain systems can combat tax fraud by boosting transparency (Hyvärinen et al., 2017). Similarly, blockchain information is used to manage dividend flows, and to reduce the double outlay problem as much as feasible in the public taxing sector (Hyvärinen et al., 2017). According to a study on tax-related to European Union intra-network buying and selling, enforcing blockchain in the TAX system can reduce sales losses by 50 to 60 billion Euros annually due to missed dealers and network fraud; instances (Ainsworth and Alwohaibi, 2017).

The application of blockchain technology in taxes, its consequences, and results are examined in this study both globally and in Turkey. The definition, nature, and development process of blockchain will explore in the primary section of the study. A taxation process victimization blockchain will be investigated in deeply in the secondary section, both globally and in Turkey (Demirhan, 2019). Solehzoda (2017) identified four options for governments to consider when using digital technologies to make a tax system, including creating laws and international products, establishing databases, and infrastructural development. The study found that creating technological instrumentation and code used in data creation is mostly supported by the implementation of electronic information within the legal structure. Alkhodre et al. (2019) propose thoughts and concepts for incorporating blockchain mechanization into the art of a Saudi Arabian tax collection; system. The current era of computerization has given rise to a typical tax collection system, as well as a shift in the relationship between the public and the tax department.

Research Methodology

The goal of the research is to present a picture

of the novel social phenomenon; as a result, a qualitative research approach is used. The study's social phenomena are the age of industry 4.0 and the integration of blockchain networks in the tax system of a developing country. In-depth interviews were done to acquire associated data by engaging respondents in immersive and in-depth talks about the research topic. Respondents were specialists in domains that were relevant to this study. The responders were chosen based on their knowledge and experience with the technologies utilized in the Pakistani tax system.

Interviewing Procedures

Tracy (2019) interprets interviews as more acceptable ways for analyzing composite extents because the evaluator can frame the participant before asking him subtle and sensitive questions and answer harsh questions in person. The semi-structured interviews used in this study were chosen to attain certain results from data collection. This sort of interview is frequently used to obtain consistent and comparable qualitative data while allowing respondents to express their opinions on their terms. These interviews also allow respondents to embellish and provide greater flexibility, variety, and choice, and thus the dimensions to elicit more material from the participants. These interviews give respondents more freedom to react to questions on their terms than consistent interviews while still providing adequate construction when compared to focused interviews.

Sample and Population

The target population was the employee of the federal board of revenue; institute charted accountant Pakistan and blockchain associations, and other related private institutions. The Snowball sampling strategy was applied to choose the sample for data collecting from respondents. The present standard was developed using participants who are current employees of the aforementioned Pakistani govt. Institution. To conduct this research, the scholar interviewed 7 employees, including those with the titles of FBR, ICAP, and private institution and commerce departments.

Results

The data was veiled, investigated, interpreted, and substantiated using thematic analysis after it was collected. TA is a readily available, dynamic, and growingly popular method of qualitative data analysis (Clarke et al., 2015). The data was then processed, categorized, and grouped into refrains and supplemental notes, known as memos, that arose as a result of the coding process in NVivo software. As a result, the resulting refrains were assigned a specific code. The data is then interpreted by recognizing and classifying themes and sub-themes across the data, as well as emphasizing any resemblances and alterations. The third phase involves data confirmation, which entails rechecking records and codes to ensure legitimacy, validity, and strength of comprehension, allowing the researcher to prove or alter theories or hypotheses that have already been established.

Participants

- Respondent one is from the govt. Department. He is a male respondent and thirty-three years old. He is an auditor in govt. Institution.
- Participant two is also from govt. department. He is a male respondent around 40 years old, holding the designation of tax inspector in govt department. He has a total round about 14 years of experience.
- Participant three is from the department of RTO office tax. He is a male respondent and around 40 years old. He is serving as an internal auditor.
- Participant four is an auditor in a private firm. He is a male respondent, and his age is around thirty-three years.
- Member five a participant is from the tax department and he is serving there as an auditor. He is a male respondent around thirty-eight years old.
- The number six participant is a male respondent from the govt. department.

He is a male respondent and his age is around thirty-six years.

- Participant seven is a male respondent from the private firm managing blockchain. He is a male respondent and his age is around about 41 years and serves as an auditor.

Respondents' Demographics

The demographic finding reveals in Table 1 where the gender results show as 7 is the frequency of male respondents and the percentage is 100%.

The age category findings show age 30-35 years is frequency 2 and percentage is 29%, age 36-40 years is frequency 4 respondents and percentage is 57%, age 41-45 years' participant's frequency is 1 and percentage is 14%.

Table 1. Demographical Findings

Factor	Category	Frequency	Percentage %
Gender	Male	7	100%
Age	30-35 years	2	29%
	36-40 years	4	57%
	41-45 years	1	14%

Impact of Block chain Technology on Tax

Here the researcher analyzes the impact of blockchain technology on the tax system of Pakistan All the individual, private, and semi-govt. and govt. institution pay tax to govt. The step is taken by governmentment and tax department is going to an online e-invoice system instead which will save time and money.

Integration of Blockchain in the e-invoice Tax System as an Open Technology Innovation

Since the decentralization of blockchain network technology, their positions are equivalent. Every individual involved in the network established by blockchain has the same position as a result of decentralization, and no party holds the role of master.

Participant 1: Obviously, automation is used for a variety of purposes; e.g., I'm bored of income tax, and tax would be the same thing; the blockchain can be used for mechanization and surveillance, therefore there is no such idea as an unconnected tax, and it gets more efficient.

The change will convert the system to a data flow rather than the flow of a product, making monitoring easier. A remark from a resource person on how data flow can help with Tax supervision is as follows:

Participant 2: The conventional system is still used in this manual. They are, in general, a movement of goods in the conventional system, which must now be substituted by a stream of data. Therefore, if the data flow is entirely dependable, management is simple, and we shall revisit it in the near future, possibly if the administration must be dependent on some statistics.

Furthermore, incorporating blockchain-based into the tax system may have ramifications for improving taxpayers' customer experience. The user experience is a crucial factor to consider when implementing expertise. This is in agreement with the department resource person's statement mentioned below:

Participant 3: Online FBR would be able to cooperate with other parties whose innovations can benefit the community. In conclusion, the third-party/outsourced tax host may easily receive for each transaction, and with Online FBR, there will be no need to worry about the server being down, etc. When user experience is taken into account, infrastructure and personnel will be affected.

Blockchain allows taxpayers to feel more secure and use the system without glitches and bugs. The following statement by a resource person corresponds to this one.

Participant 4: This approach, in my opinion, requires the usage of a private

blockchain. The reason is that the authorizations can merely be attained through limited login attempts, after which the node that does the authentication is chosen, which might be the number's issuer or one of several other parties.

The following is a breakdown of the several blockchain types that can be used in the Pakistan tax system, specifically the TISN granting system. There are three types of blockchain: public, consortium, and private. Because data security is the most important factor to consider, the private blockchain is believed to be the most appropriate blockchain technology. The private blockchain is the best option since the nature of taxpayer data is highly sensitive, and it would be hazardous if it were accessed by unauthorized individuals.

Participant 5: "I believe it is preferable to have a permission private blockchain since it will allow for public participation while yet allowing for the selection of nodes."

Because TISN is not confidential, it is transparent as secure data. It will not be a problem in case a TE detects the TISN of alternative TE; rather, it would enable data openness. Furthermore, the information exhibited in the chunk dispersed throughout the nodes of attention doesn't include complete operational information, but just the transaction details. Because not all TEs as nodes have sufficient storage capacity, the size of the data included in a block cannot be huge.

Permissions in blockchain technology are divided into two categories: permissionless and node permissions.

Participant 6: "Any update to a contract must be communicated to the entire ecosystem of the connected platform." That's the difference: it cannot be one-sided. The goal of smart agreements is for everyone to agree on the game's rules. Therefore smart agreements are like game instructions; why decide when agreements are not that simple to alter?

Smart contracts are similar to game rules in that they require all parties involved to agree to and follow the rules.

Participant 7: Whenever a smart contract is modified, the ecological system of the associated platform must be informed. That's the differential: this cannot be one-sided. The goal of smart agreements is for everyone to agree on the game's rules. So smart cards are like game rules; why agree when smart contracts aren't easily changed?"

Government, Consultants, & Opinions of Associations on the Use of Blockchain Technology in the tax Structure, Specifically for the electronic Invoice in Pakistan

This administrative procedure necessitates the approval and assistance of each directorate's highest management. Management plays a significant impact in determining whether or not a company can utilize blockchain technology. The following statement from an interviewee informs about the intention of higher management for the adoption of blockchain technology.

Participant 1: "Management commitment is critical because it will not operate without it. Currently, our leadership is pleased about the system for improving tax administration efficiency. Because if it's efficient, it'll be effective, and income will rise as a result."

This comment implies that top-level management support is critical for the acceptance of blockchain in the tax system of Pakistan. governmentment, conversely, must think about to what extent an organization is ready to use blockchain technology.

Participant 2: Because the company concept is already digital, it is easily customizable. Everything would be tough if it were still on paper; however, the tax department is already utilizing e-Invoice, so there is only one step left. However, because customers are previously accustomed to e-invoices, the deployment of the blockchain has no impact on the current business activities of taxpayers. After all of the procedures have been completed and the innovation can be implemented, we must focus on the network. The level of

organizational readiness? What about the people? A network host, for example, may be set up.

The FBR, as the regulatory authority of tax implementation & collection in Pakistan, understands that the use of blockchain networks is not an easy concept that can be done at any level but must begin with the basics. This is because a lack of awareness of the technology might lead to misunderstandings about the technology's benefits and applications.

Participant 3: Perhaps something can be worked out there. The essential is that the entities engaged are those that have been authenticated if we want one that is private. On a public blockchain, anyone can join; on a restricted blockchain, only verified entities are permitted. Because the transactions come from and are carried out by trusted persons, the process of accomplishing the forum is made easy.

The implementation of a blockchain network in Pakistan is subject to some restrictions, one of the components that must be met is infrastructure. The degree of the FBR network substructure preparedness should be assessed before executing a technology development program. Rather than focusing on the core infrastructure, there is a need to critically establish regular infrastructure mechanisms to emphasize advanced levels in generating valuable services.

Participant 4: The issue is that the decision to employ a particular technology has implications for others which will be developed later on. What should be the structure of the blockhead network, and then what must be vibrant, because you must be precise about everything first? Even if e-invoicing already uses IT and blockchain, there are still gaps in the procedure, in my opinion. As a result, before it is implemented, the procedure, specifically the Tax Payment Mechanism, must be considered. "The government, in my opinion, is a good fit for the private blockchain since they manage it." It can be confirmed if the public administers it, but the role of governmentment in this scenario will be minimum."

If blockchain technology makes TE's data and identities vulnerable, it should not be used in the Tax system. As a result, a smart agreement that governs this situation is required. Smart agreements are a feature of a blockchain network that acts as a virtual agreement that may control the current state of the network.

Participant 5: The function of the private enterprise is significant since private firms also conduct research. If the motivation is business, for example, there will be no innovation unless there is revenue. However, if a private company is involved, you must create something similar; one should be a visionary individual, and the implementation will be on the part of governmentment and operator. If you truly want to use blockchain technology, you must approach the highest levelsgovernmentment, such as the President and Finance minister, and explain why this kind of network is critical to the development of the country.

It is possible to apply blockchain networks in the TAX organization, mainly for e-invoicing. The administration, on the other hand, must put in place a comprehensive governance framework that includes regulations for each group's responsibilities, procedures for accepting or rejecting allowed players, correction processes, applicable laws for handling disputes, and so on.

Participant 6: "Regulations are vital, but they aren't as simple as we think. Because blockchain technology is complex, in what way the complicated phrases can be simplified into instructions that everyone, including regular people, can understand? Isn't it true that the internal infrastructure is now the most significant factor? There is little the taxpayers can do if they simply need to follow the method, regardless of the form. However, if a policy is needed to be devised, whatsoever the method is now if the mechanism is still now is Output Tax & Input Tax, Perhaps information on the vendor is required; somebody is selling and will state it.

The Govt. planned blockchain technology network does not have to be based on current

infrastructure. Instead, the state should tailor infrastructure to its requirements.

Blockchain technology contains difficult and sensitive technical features because it is a novel technology that has never been used before. As a result, having a secure and quite well network infrastructure is critical. Here are the thoughts of a Pakistan Blockchain Network resource person on how the FBR could maintain security and anticipate data hacking:

Participant 7: The need of the hour for governmentment and regulatory bodies is to establish a blockchain technology network that will be extensively adopted. There are two ways to accomplish this. The first option is to make use of infrastructure that is already available or to build a new one. At their level, I believe the DGT should develop its own network, as I believe Pakistan can perform. This is Pakistani information, after all; therefore do not use a policy from another country. It is good to utilize it in the testing phase, instead of our sensitive data will be seized by a third party till the deployment is completed. If my memory serves me correctly, also segregation is there that states that the third parties are unable to accommodate this kind of information; this information, particularly taxation data, is unquestionably critical.

Discussion

Blockchain technology can be used to distribute safe tax data, such as the TISN. The TISN system, which is based on blockchain technology, will make submitting the TISN from the FBR to the TE more efficient and faster. In addition, the TISN's transactions can be tracked and analyzed.

Attention must be paid by the Govt. to the peculiarities of blockchain networks while undertaking a module linked to the implementation of a blockchain network in tax, as a result of this research. governmentment should look into whether issues in the tax system could be solved with technology. This is because, in the appropriate structure, the blockchain network has the prospective to deliver tremendous benefits. Furthermore, governmentment should create an opportunity for individuals, businesses, and other stakeholders to work with governmentment to develop the best blockchain technology architecture for the Pakistan tax system.

Collaboration with outside specialists in the subject will give governmentment with new insights and input. As a result, governmentment will be able to create an effective and efficient tax system based on blockchain technology. The use of blockchain technology in the tax system could have implications for improving the efficiency of the electronic tax system, improving the user experience of taxpayers using the electronic tax system, assisting national economic analysis by making tax data vibrant and testable, and improving the transparent tax structure. In the long run, blockchain technology will improve the economy and will impact the lives of individuals in the country.

As a result, Govt. should be in the favor of implementing blockchain technology in the tax structure. This technology offers a lot of promise in terms of assisting governmentment in developing a more vibrant TAX system. Govt., particularly the FBR as a tax regulatory body, must be able to deploy blockchain technology at all levels, from the roots to the most complicated. Uncertainty about the benefits and applications of blockchain technology could lead to misunderstandings. Apart from human resource preparation, business models, infrastructure, information handling, governance, and the development of smart agreement functionalities are also required.

Academic institutions play an important role as collaborators who may provide feedback on the benefits, objectives, and hazards of FBR. This type of collaboration might take the procedure of making approvals, conducting training, and offering theoretic input into the model of a blockchain-based tax system.

Tax returns and settlements are calculated over a predetermined time, such as monthly or quarterly, and the counts are based on self-assertive dates, such as receipt dates, rather than exchanges. Tracking e-

invoices installments is a difficult procedure for governments, even if it is possible.

The electronic age is also transforming tax collecting systems, not only by altering the relationship between residents and tax authorities, but also by altering how government taxes are collected, filed, and kept. Tax experts think that the cooperation of higher-ranking officials, such as the president and the finance minister, is critical in using blockchain technology in tax.

Consequently, there must be clearly understood laws and regulations (particularly those about information handling) that can influence how quickly blockchain technology develops.

Finally, respondents belonging to the association stated that if Govt. is willing to improve the tax system and wants to use the technology, especially for electronic Invoices, it must look into systems and human resource preparedness, resistance to modifications, reasonable protocols, and partnerships with numerous parties. It is critical since a managerial agreement is required.

Additional research into the implementation of a blockchain network in the tax structure is still required. We offer some suggestions for future research projects. For starters, further research might examine the willingness and deployment of blockchain networks in the tax system using alternative frameworks. The usage of diverse diagnostic structures will bring numerous paybacks that might be utilized as input in the use of blockchain networks in tax systems.

This study would help disseminate information or ethical learning from blockchain literature conducted in other nations. Third, future studies can assess the organization's readiness to incorporate blockchain technology in the tax system. Finally, more research may be done to experimentally investigate and evaluate the usefulness and efficiency of implementing blockchain in the tax system, to see if it is effective in lowering tax collecting costs and risks, improving data security, and increasing tax income.

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