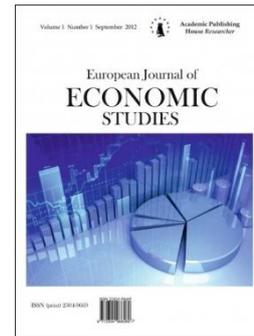


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Exploratory Analysis of Blockchain Application in Trade Finance

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Abstract

This study is using exploratory analysis to explain blockchain technology application and its importance in trade finance for call centers and dispatcher companies. The plan is to process the Internet sources that are gathered involving blockchain, call centers and booking business and move little deeper in the world of call centers, including direct information and statistics from the managers of Inmotion Ltd. This study will review the actual introduction of blockchain as young technology, the importance of blockchain applications and its content, and within analysis and discussion part this research will try to propose the solution to this or similar company, that has an access to a huge number of human resources as the most important asset for their business.

Keywords: blockchain applications, trade finance management, dispatch industry.

1. Introduction

This study is analyzing Blockchain technology application and its importance in trade finance. As the topic name says, it will focus on a certain industry which is dispatcher and call center companies in Bosnia and Herzegovina. The main purpose of these companies is that they serve as intermediary of trade between customers and their deliverers, and that makes them as a guarantee that trade and delivery will happen. Usually, call center companies in BiH have their origins in Germany which part of job contains speaking only in German, but this will be an overview of a young call center company doing its business in USA from BiH with background of the company based in United States of America.

Blockchain is still young technology which is involved in numerous challenges. It has the potential to change many aspects of financial services sector, the economy overall and it introduces new ways to intermediate capital and risk to financial firms. This means that Blockchain will change, improve and secure many more sectors and every aspect of economy in total. However, the technical and social infrastructure supporting the technology is still significantly underdeveloped.

Blockchain consists of a number of technologies that work together to create a financial book of recorded data objects called blocks. These blocks provide a framework for digital currencies, such as bitcoin, to conduct secure online transactions. Meaning that Blockchain has one block from where it starts, and every next block contains its own data, its own hash and hash from previous block accept the first one. That gives the operations or transactions security with which this concept would change and improve everything in the near future.

Call center that is used as an example is Inmotion Ltd. Inmotion is a logistics solutions provider and the company is able to coordinate shipments using all types of transportation

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including: over the road, air, ocean, intermodal, cartage and LTL shipments. Inmotion is the operational support portion of our operations in BiH and it has several branches in several cities like Bihać, Velika Kladuša, Sarajevo and Tuzla.

In call centers and dispatcher companies, trade finance is most common financial service and tool with which they operate. Trade finance includes payment, lending, the issuance of letters of credit, factoring, export credit and insurance. Companies involved with trade finance are importers and exporters, banks, insurers, credit agencies and service providers.

2. Literature review

In the data that is collected, the concept of blockchain is explained in the book „The Impact of Blockchain Technology on Finance: A Catalyst for Change“, which is written by five author and is very young being published in 2018 at „International Center for Monetary and Banking studies“ (ICMB). Talking points are Blockchain beginnings and what the Blockchain is, the book describes Blockchain technology basics, Blockchain opportunities and challenges and most important part for this study, the part of Blockchain technology and finance. In that part they focused on where Blockchain could have impact like payments, digital identity, primary securities issuance, security clearing and settlement, derivatives, post-trade reporting and trade finance. This book also features the parts of public policy considerations and regulation of crypto-finance and broader potential economic impact (Casey, 2018). While talking about steps to introduce Blockchain, we examine the article from blockgeeks.com in 2018 which gives us an inside look from famous experts that Blockchain is an incorruptible digital ledger of economic transactions and that it can be programmed to record not just financial transactions but virtually everything of value. As revolutionary as it sounds, Blockchain is truly a mechanism to bring everyone to the highest degree of accountability. There will be no more missed transactions, human or machine errors, or even an exchange that was not done with the agreement of the parties involved. Above anything else, the most critical area where Blockchain helps is to guarantee the validity of a transaction by recording it not only on a main register but a connected distributed system of registers, all of which are connected through a secure validation mechanism (blockgeeks.com).

The researchers at Harvard were also taking their look at Blockchain revolutionary purpose. They begin their review with a slogan that says: „It will take years to transform business, but the journey begins now.“ According to these authors, contracts, transactions, and recordings of them are among the defining structures in our economic, legal, and political systems. They protect assets and set organizational boundaries, they establish and verify identities and chronicle events and they govern interactions among nations, organizations, communities and individuals. „They“ in these sentences refer to every governed and authorized body in the world. Blockchain promises to solve all these problems and could dramatically reduce the cost of transactions and, if adopted widely, reshape the economy (Iansiti, 2017). Blockchain is decentralized architecture and distributed computing paradigm that has recently attracted attention from all sectors of society, believed by the authors that written the research named „Blockchain, bank credit and SME financing“ (Wang, 2018).

The commentary „4 effects of blockchain on financial services“ is written in the form of article and is published at the blockchaintechnews.com in July 2017. They stated that Blockchain is best suited for the environments where is shared information and distrust or a need for validation between two parties. Bearing this in mind, they set out some thoughts on aspects of financial services likely to be impacted by the development of Blockchain technology. Four types of financial services that Blockchain effects are: Payments and clearance, Capital markets, Operations and Currency (Christensen, 2017).

According to Subbiah, one of the authors of the book „The Age of Blockchain: collection of articles“, Blockchain is a revolutionary database that goes away with the weaknesses of traditional solutions for storing big data. It provides a transparent record of the entire business network, allowing buyers and sellers of each transaction to track where the transaction is in its lifecycle (Subbiah, 2018). Blockchain as a technology is more of a ledger recording "agreements" and it is a system which contains a continuously growing list of records, called blocks, which are linked and secured using blockchain-based encryption. We will deal with similar case to our topic and the author Abbaspour in his published chapter, focuses on Blockchain technology for mining industry and presents a case with dispatching inside of it. According to him mining industry has been always

one of the targets for hackers. In addition, it is dealing with receiving and recording huge amount of data, that are in need to be securely stored and easily be available. In this chapter published in September 2018, some of this is presented and processed as well as the case study of a truck dispatching system based on Blockchain concept (Abbaspour, 2018).

The paper written by Tsai in 2016 presents system-related issues for Blockchain in financial applications. At first it presents the design of Blockchain without consideration of any application scenarios and issues such as performance, security and scalability, leading to specific Blockchain designs. Sample Blockchain scenarios are analyzed and this lead to additional designs. Specifically, as written here, two new kinds of Blockchain emerge: for storing information at transactional level and for storing account information. By splitting traditional Blockchain into these two Blockchains, it allows one to optimize the system with respect, scalability and privacy (Tsai, 2016). The article „5 blockchain technology use cases in finance“ written by Jacob Boersma, one of the managers in Deloitte which branch is in Netherlands, discussed about Blockchain use in banking industry and in finance overall. This author highlighted topics like „What is Blockchain technology“, „Speeding up and simplifying cross-border payments“, „The future of share trading“, „The benefits of smart contracts“ and „How to improve online identity management“, and gave five particular articles with covering mentioned fields of finance and giving the separate view of every single one particularly (Boersma, 2018).

A papers that are published almost 20 years ago, explained the call center importance and use in modern era. According to this paper the importance of call centers in the economy has grown dramatically since 1878, when the Bell Telephone Company began using operators to connect calls. In the United States, more people work in call centers than in, for example, agriculture from 1997 (Pinedo, 1999). The article „Determining the Trade-Offs between Service and Sales in Retail Banking Phone Centers“ explores the trade-offs between service and sales in call center operations in retail banking and develops an analytical approach to quantify the costs and benefits of moving toward a sales-focused operation. It is shown that in addition to its visible costs, such as training and technology to build support systems for sales activities, cross-selling can have damaging effects on customer service due to the additional load it creates on the system. It is further demonstrated that designing the right process and adopting human resource practices that support this design are critical in determining the success of a cross-sell program (Halilbegovic, 2018).

The chapter „Call Center“, written on Research Gate at April 2017 by three authors is covering a little preview of how call centers are doing their business and this source is relatively new because of youth expansion of this industry. As for these authors the call center handles sales calls for an insurance company and needs real-time performance data for his group based on a number of key metrics. They explain a dashboard which runs on a large wall-mounted display so that the manager and members of the call center can monitor it periodically throughout the day. People like to have feedback on their performance, recognition for success, and they like to know where they stand (Wexler, 2017). According to Sato, call center is a division that specializes in dealing with customers. Early studies on call centers regarded them as a strategically important areas that, despite some negative aspects, were acknowledged to possess a certain level of expertise and to have a high degree of autonomy as interfaces for customers. However, this view gradually changed, with call centers coming to be seen as workplaces presented by harsh working conditions and isolated from the other divisions of the company (Sato, 2018).

3. Methodology

Choosing a exploratory approach and analysis:

This research paper adopts a exploratory research approach and will use that methodology. It is the approach to analyze data sets to discover their main, visual characteristics. A statistical model can be used or not, but this approach is mainly for exploring and discovering what some data can tell us beyond the formal modeling or hypothesis testing task. This technique often uses multiple disciplines in one study. The plan for the analysis is to explore two different call center eras from around year 2000 and today, to compare situation in USA with call center in BiH and what effect would be caused to apply Blockchain into call centers. There are advocates that are considering that applying Blockchain technology can exclude and turn off the brokers in the world.

If that happens, it creates the collapse in call centers. This study tries to give a way on how to use Blockchain to make a business world easier, but not to destroy the job of millions of people.

In Bosnia and Herzegovina these things go slower, so mentioned jobs are safe for now. Brokers, bookers and dispatchers in call centers can do their job regularly. It is the matter of time on when Blockchain will come to BiH, but it is not for sure that we are that much developed to use it in every department of our economy. Many people in charge are certainly afraid of the technology and some of them does not even have a clue what this technology brings to the table.

Sources, data, materials from Internet and direct visit to Inmotion:

The literature review in this study starts by the sources from the Internet about Blockchain, Blockchain for beginners, the truth about Blockchain, going through the articles of what are Blockchain uses in financial services overall, then using the sources connected with trade-offs in call centers, the purposes of call centers and dispatcher companies, contain of trade finance and etc.

The plan is to process these Internet sources that are mostly mentioned in the section above and move little deeper in the world of call centers, including some direct informations and statistics from the managers of Inmotion Ltd. company. The information from company that is included in this research is provided by office and human resource manager of Inmotion Ltd. They have given a plan on technology importance and effect on the business in total now and in the near future, in what state are the financial statements of the company and particularly how they manage employment as their biggest asset and revenues after they book transactions and operations. After meeting with them and collecting the important information, the idea is to see if the company can manage to not fall behind from competitors, we will see if the company is planning to determine the use or threat of Blockchain technology and how that will effect all of their many aspects of business.

Going through articles on research browsers and pages there is no specific topic with the similar name as this research paper. Including in the search of the particular parts of this topic, there is a way to find some connections, but the rareness of the researches on this specific subject makes this research more complicated to write.

Categorization and analysis of the sources from Inmotion company and Internet:

The aim was to create a research paper or a study which would have processed one example of business in Bosnia and Herzegovina, which is increasing highly in the last 4–5 years. This data and these sources material is for the business that has global implications. The data used is not old too much with some exceptions.

The company that is covered is not older than 3 years, the books used are inside of last 4-5 years and articles are usually new and only few months old. This confirms that the parts of topic that were mentioned, as the dispatcher/call center companies and Blockchain technology, are growing simultaneously. Besides the Internet sources, the insert of Inmotion Business Plan and their first-hand examples of business will be included and provided with an inside look of how the booking system actually works. That data will be helpful to conclude how the Blockchain can react on every detail in this business.

Organization of the data with application of Blockchain:

This research paper is starting with the introduction and it mainly focuses on Blockchain technology. Even there are some data and sources that were used to close up the intention of what will be written in this study. The books and the articles were used to define the Blockchain technology. The study continues with mentioning the sources from which data is mostly collected and later in references will be mentioned every data and material source gathered for the sake of this research. The large part of analysis and discussion will be the information and data collected from intervening directly to the origin for this idea and topic.

That data is also mixed to round up what have been tried to be put up close. After going through the analysis and discussion, the study will go into the conclusion. This will give the answer to use Blockchain or not to use it in this business, and will create the clear view for owners and investors future activities for this type of business. The Blockchain itself will overtake the world in the following years and we must consider the existance of call center jobs.

Blockchain application in this research:

As it is already mentioned, all of the data will be analyzed with exploratory research approach. It will gather the information and theory but also the data directly from the company and will be insured that data is analysed and represented. This approach will explain and show on

what way is Blockchain technology is going to effect and influence this business, make it easier, more reliable, secure, unhackable, fast, with less contributed energy, organized, mark, noble and worthy. The methodology is the part where is the reveal of the procedure and where did data, material and sources of the topic were gathered. The conditions of this paper are limited and it faces particular restrictions, the procedure is possible by using already provided materials, variables and statistical informations. This study focused on one of the world's most expandable territory in finance by using the trade finance, and global topic of Blockchain technology.

Even so Bosnia and Herzegovina is undeveloped country, ignoring Blockchain technology and its use would sink our level of development even deeper. Postponing the aquisition of this technology can only result in downfall, because this country is full of non-legal actions, bribe, criminal, thefts and etc. As a targeted country and classified as the environment where non-valid information and distrust is present in every aspect of business, the appointment of Blockchain should be as soon as possible.

This special topic is the type of one that should be more covered and researched because more and more people are engaging into this businesses. By taking each part of the topic, the study tries to conclude everything into one unity and try to minimize the wideness of it. Blockchain will provide the security in almost all fields of life and this research pointed out the one that is very rare in mentioning and processing.

4. Analysis and discussion

In the study from 1999 named „Determining the Trade-Offs between Service and Sales in Retail Banking Phone Centers“, the authors are taking their view of call centers at the start of a new century. Call centers, also known as phone or customer service centers, have become one of the most important delivery channels for service firms throughout the world. In these centers, customer service representatives with direct access to their firm's databases provide service to customers over the phone. For some companies, call centers take on a support role next to a major physical delivery network, and for others it is the sole delivery channel that constitutes the firm's entire customer interface. The 1990s has seen a growing focus on phone centers, as alternative low-cost service delivery channels across a variety of industries. This growth has been enabled by developments in telecommunication and information technology that have allowed phone centers to route incoming calls to the appropriate agents, to perform standard queries or transactions automatically in voice response units, and to access and update central customer databases, thereby enabling the online performance of many transactions. This approach attempts to explore the issue of compatibility between service and sales, when viewed from an operations standpoint. Specifically, this study is considering a call center that is primarily designed for low-cost, high-quality customer service. This type of a center will strive to keep customer wait times at a minimum, thereby reducing the number of abandoned calls, while achieving the goals with the smallest number of well-trained service representatives as possible (Aksin 1999).

At the next figure we see the company and their code, adress, phone and branch in the first section where it stands as Buchanan Logistics, INC. In second section we see the trucking company which is Landstar Ranger from Jacksonville Florida, with contact, phone and order date. At third and fourth section we have commodity, weight, trailer (type of transporter), refference, then customer company which is Autozone DC, their adress and date of expected delivery. That section contains refference numbers and last section contains payment, carrier freight pay and total carrier pay.

This is one example used from Inmotion Ltd. to overview how traditionally the load is booked. This receipt is the check provided for trucking company and the actual profit that broker or dispatcher collect for the company is the difference from what is the payment price provided on the check for customer company. If the whole payment from customer company is 2600 \$, the payment for the trucking company is 2000 \$, and the profit of the booker is 600 \$.

BUCHANAN LOGISTICS, INC. MC# 431807 www.buchananhauling.com
 4625 Industrial Rd
 Fort Wayne, IN 46825
 Phone 260-471-1877 Ext: 2507 24/7 & Afterhours 260-469-0521 Page 1
 FAX: Email: marias@buchananhauling.com Buchanan Order # 1980514

Carrier: LANDSTAR RANGER FL 32224-9137 Contact: Tom
 JACKSONVILLE Order Date: 07/27/2018 1611 Phone: 210-876-0023
Fax:

Driver Name: Commodity: HAZARDOUS CHEMICALS
 Driver Cell: Weight: 39824.0 Trailer: VAN OR REEFER
 Carrier Tractor: Temperature range: -
 Carrier Trailer: Reference: 776720234

PU 1 Name: AUTOZONE DC 55 CROSSDOCK Date: 07/28/2018 1700
Address: 2350 AIRPORT RD

TERRELL TX 75160 Driver Load: N
 Reference number: ZZ SOLO
 Reference number: AO 1963006
 Reference number: PO 77188872
 Reference number: PO 77190304
 Reference number: PO 77191050
 Reference number: PO 77192373
 Reference number: PO 77192390
 Reference number: PO 77192770
 Reference number: PO 77192390
 Reference number: PO 77190304
 Reference number: PO 77191050
 Reference number: PO 77188872
 Reference number: PO 77192770
 Reference number: PO 77192373
 Reference number: PO 77180272DI
 Reference number: PO 77182170DI
 Reference number: PO 77185969DI
 Reference number: PO 77192168DI
 Reference number: PO 77180272DI
 Reference number: PO 77190304
 Reference number: PO 77191050
 Reference number: PO 77192373
 Reference number: PO 77192390
 Reference number: PO 77192770
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 Reference number: PO 77190304
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 Reference number: PO 77188872
 Reference number: PO 77192770
 Reference number: PO 77192373
 Reference number: PO 77180272DI
 Reference number: PO 77182170DI
 Reference number: PO 77185969DI
 Reference number: PO 77192168DI
 Reference number: PO 77180272DI
 Reference number: PO 77182170DI
 Reference number: PO 77185969DI
 Reference number: PO 77192168DI
 Reference number: PO 77192082
 Reference number: PO 77192082
 Reference number: PO 77190063
 Reference number: PO 77190063

Payment	Carrier Freight Pay:	\$2,600.00	
	Total Carrier Pay:	\$2,600.00	USD

Instructions
 Special instructions here

Fig. 1. Transaction Receipt (Buchanan Logistics, INC. – Landstar)

As written in the book „The Impact of Blockchain Technology on Finance: A Catalyst for Change“, Blockchain technology can reduce the cost of trust, something that manifests itself in numerous ways within the financial system. These costs range those associated with vault doors, cybersecurity, settlement procedures, user identification, compliance teams, security guards and anti-fraud regimes, to the excess amounts that banks and other centralised institutions can charge customers.

Trust exists in the fundamentals of deposit banking, custody, insurance and secondary market trading. Depositors must trust the safety of their money at a bank. Market participants trust that their trades will be executed fairly according to a transparent set of rules. Financial institutions must trust costly back-office processes to reconcile centralised ledgers and accounting systems. In an effort to address these various costs, Distributed Ledger Technologies are being explored by institutional actors such as large banks, exchanges, clearing houses and central banks, as well as by

new firms seeking to disrupt existing business models. Incumbent firms are hoping the technology can help them lower costs and risks, particularly for back-office or post-trade functions. Start-ups are aiming to provide the public with better and lower priced services while possibly capturing part of the significant economic rents within the financial services sector (Casey, 2018).

The authors wanted to close up that financial services sector, like other important sectors of global economy, has faced numerous challenges and showed some flaws. History is loaded with banking and financial sector crises. Tens of millions of people around the globe lost their jobs or their homes as a result of the 2008 financial crisis. Even there is a need to carefully explore and consider how application of Blockchain technology will affect financial stability, it is also worth exploring how this technology, might help build a more flexible and stable financial sector. The 2008 financial crisis is the latest reminder of the long history of large risk in the financial sector. Current methods for clearing and settling transactions, even improved from earlier generations, remain costly with many reconciliation and risks. Furthermore, many financial products have high transaction costs in many parts of the world.

In the next figure we can see similar transaction as the previous, but here is an example of detailed summary of rate, commodities, stops, accessorials and equipment used in this transaction. This paper that shows a customer agreement, contains invoices and total revenue, description of commodities, address of stops, and in the upper section there are informations about the load. We see that the profit of this booker is 450 \$. If we want to use Blockchain technology, in this case there will be included a load information section and only a revenue for delivering company.

Landstar - AUZ Customer Rate Confirmation Agreement
The CUSTOMER and CARRIER agree that they are bound by all of the conditions contained herein. CUSTOMER hereby agrees that in the event its acknowledgment and acceptance is transmitted to CARRIER through an affirmative e-mail message, the CUSTOMER hereby agrees that such form of acknowledgment and acceptance constitutes a writing signed by both parties.

FREIGHT BILL NUMBER: 5323586

Date: 7/27/2018
 Confirmation Effective Date: 7/27/2018
 Expiration Date: 7/27/2018

Load Number: 14756282
 Load Count:
 Load Type: TL

Agency Information
 Name: AUZ
 Address: 412 N BENTON ST
 City, State ZIP: WINNEBAGO , IL 61088-9574
 Contact: Tommy
 Email: tom.sh@taylor-corp.net
 Phone: (210) 876-0023
 Fax:

Billing Information
 Company: GILTNER LOGISTICS SERVICES INC
 Address: PO BOX 5128
 City, State ZIP: TWIN FLS, ID 83303-5129
 Contact:
 Email:
 Phone: (208) 644-9090
 Fax:

Load Origin
 Company: QUALICHEM INC.
 Name: KELLY
 Address: 2003 SALEM INDUSTRIAL
 City, State ZIP: SALEM ,CU, VA 24153
 Pickup Date/Time: 7/31/2018 13:00
 Loading Instructions:

Load Destination
 Company: TORONTO LUBE SERVICE
 Name:
 Address: 3175 14TH AVE, UNIT #2
 City, State ZIP: MARKHAM, ON L3R0H1
 Dropoff Date/Time: 8/1/2018 08:00
 Unloading Instructions:

JIT: No COD on Commodity: No Total Miles: 507

Rate Summary		
Invoice Line Haul	Invoice Accessorial	Total Revenue
\$2,000.00	\$450.00	\$2,450.00

Commodities									
Pcs	Description	Dimensions	Cargo Value	HighRisk	Rate	Line Haul	Miles	Weight	Rate Type
	HAZMAT NON-HIGH RISK OR AA5E			No	\$2,000.00	\$2,000.00	507	41621	Flat

Stops			
Address	City, State	Zip	Date, Time
2003 SALEM INDUSTRIAL	SALEM ,CU, VA	24153	7/31/2018 13:00
3175 14TH AVE, UNIT #2	MARKHAM, ON	L3R0H1	8/1/2018 08:00

Accessorials		
Description	Quantity	Revenue
SORTING & SEGREGATION	1	\$100.00
FUEL SURCHARGE	1	\$250.00
DEADHEAD	1	\$100.00
	Total:	\$450.00

Equipment				
Trailer Type	Trailer	Truck	Operator(s)	Container
VAN	698864	209185		

Additional Comments
 Tommy Shelby (tom.sh@taylor-corp.net)

Confirmed By: _____ Date: _____

Fig. 2. Booking Agreement (Landstar, INC)

Blockchain is best suited for environments where is shared information and distrust or a need for validation between two parties. Financial markets are likely to see a large shift in the processing of transactions. Blockchain and digital currencies make it possible to eliminate certain elements of distrust in transactions, the middleman or in this case any booker of the load. This simplifies the clearing process, and will change the role of intermediaries. The impact is likely to be seen on a variety of transactions including legal arrangements and simple person-to-person wire transfers, as Blockchain allows users to introduce a wide range of validation mechanisms.

As said by Christensen and Dennis, Blockchain technology makes it possible to transfer value more efficiently, the flow of capital is likely to shift as well. One of the major applications of Blockchain technology will be in back office functions and internal operations such as reconciliation or clearing processes. According to them, it is expected that these internal, back-end types of applications of Blockchain are what large financial institutions will likely invest in initially. Generally, Blockchain is expected to improve internal banking processes such as reconciliation and know your client processes. Blockchain and digital currencies are expected to change the way parties transact in coming years (Christensen, 2017).

After traditional booking, here is an improvised solution for the millions of jobs of bookers and intermediary servicers like dispatchers, brokers and many others. Pictures as a platform for this solution are taken from „Blockchain, bank credit and SME financing“, the article written by Wang, Lin, Luo at Research Gate. The idea is to use all three sides that we mentioned in traditional dispatch/call center job, but with the Blockchain as a measure of everything done correctly and according to the law. Trucking company will get their share, customer company their delivery, and intermediary company will get some share because of the service, instruction, information and every effort used to help a delivery or transaction happen (see Figures 3, 4.)

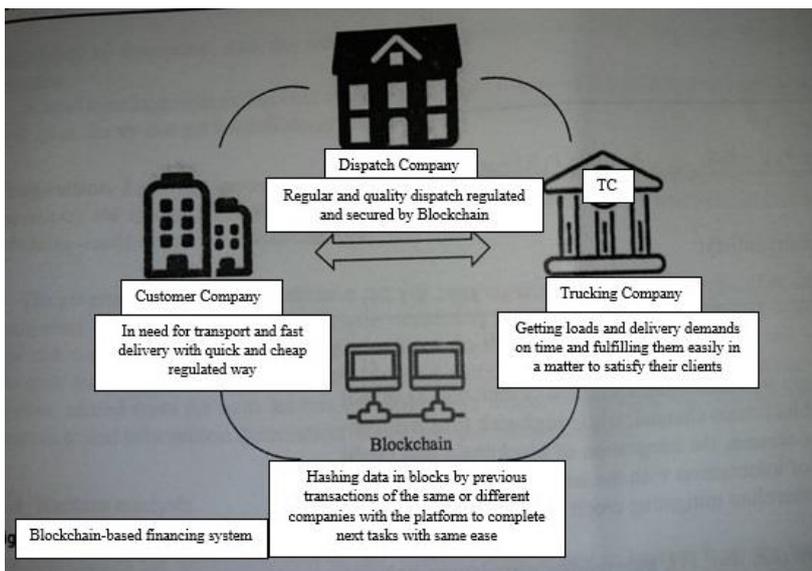


Fig. 3. Blockchain-based financing system

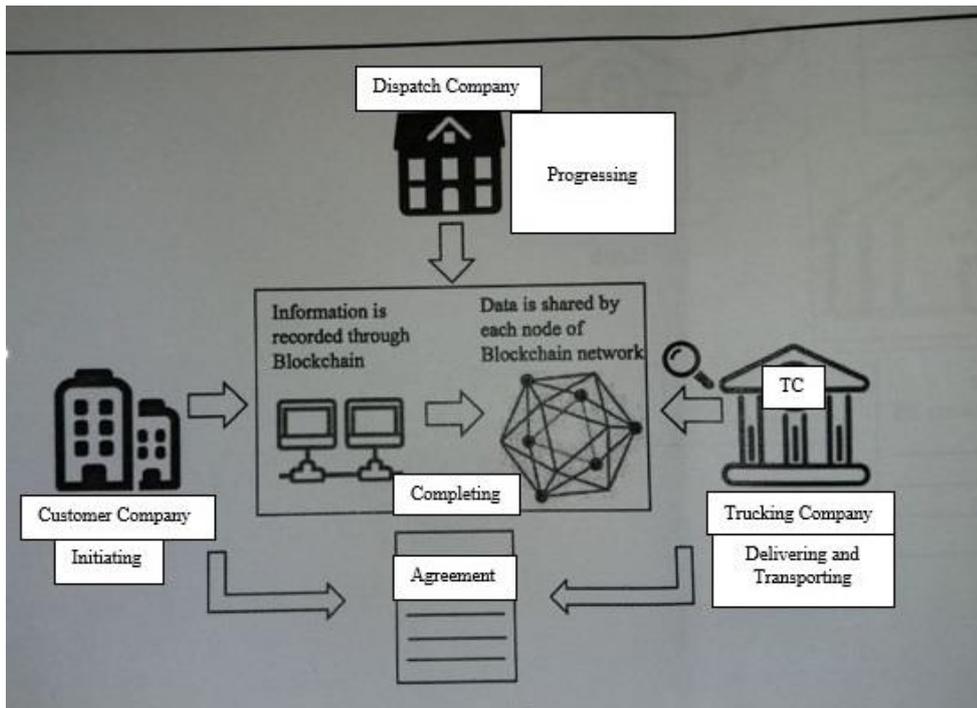


Fig. 4. Blockchain application in Dispatcher business (Wang, 2018)

This industry, the author Abbaspour has been referring to call centers, is known as an industry with a high turnover and has always been one of the targets for hackers. In addition, it is dealing with receiving and recording huge amount of data, which are need to be securely stored and be easily available. This forces managers and engineers to look for the safest and most efficient way to fulfil their requirement. Blockchain technology, which is also known as the distributed ledger, can highly resolve this problem (Abbaspour, 2018).

5. Conclusion

This research has determined the effect of Blockchain technology regarding trade finance in call center companies, and particularly regarding call center named Inmotion Ltd. in Bosnia and Herzegovina. Inmotion Ltd. is an intermediary logistics service and solution provider. This company is able to coordinate shipments using all modes of transportation.

This study reviewed the actual introduction of Blockchain as young technology, the importance of Blockchain and its content. Inside of Blockchain is one block from where it starts, and every next block contains its own data, its own hash and hash from previous blocks accept the first one. It is secure way of doing business in the future and it has a big importance in trade finance.

Trade finance is the type of finance that includes payment, lending, factoring, insurance and etc. It is one of the most important features in dispatch/call center companies and it could be largely involved in this technology.

This research continued with literature review that contained all sources mentioning important parts of the topic. This exact topic or similar is not processed in any well known research, site or library and it could be done only by using these sources and putting them together. The methodology of this study is presenting exploratory approach which is mentioned in the topic also. That approach gives the ability to explore the myriad of options and this study focused on analyzing the situation of one company if Blockchain technology is applied with the traditional booking business.

That traditional booking was the concern of large part of analysis which contained the original transactions and bookings from Inmotion Ltd. Analysis and discussion contain the improvised solution to this or similar company, that has an access to a huge number of human resource as the most important asset for their business. Dispatcher, brokers and other bookers could extinct if this technology applies, but the milion of jobs should not be jeopardized.

Blockchain could give the trade finance and its supporters either positive or negative outcome, but the goal of this study can be used to save or change something to do with this industry.

References

- [Abbaspour, 2018](#) – *Abbaspour H.* (2018). Potential benefits of blockchain technology for mining industry: with a case study of truck dispatching system in open pit mines. Research Gate.
- [Blockgeeks.com, September 2018](#) – Blockgeeks.com, September 2018. What is Blockchain Technology? A Step-by-Step Guide For Beginners.
- [Boersma, 2017](#) – *Boersma J.* (2017). 5 blockchain technology use cases in financial services. [Electronic resource]. URL: Deloitte.com
- [Casey et al., 2018](#) – *Casey M., Crane J., Gensler G., Johnson S., Narula N.* (2018). The Impact of Blockchain Technology on Finance: A Catalyst for Change. ICMB.
- [Christensen, Dennis, 2017](#) – *Christensen K., Dennis J.* (July 10, 2017). 4 effects of – blockchain on financial services. Fasken Martineau DuMoulin.
- [Iansiti, Lakhani, 2017](#) – *Iansiti M., Lakhani K.R.* (2017). The truth about the Blockchain. Harvard Business Review.
- [Halilbegovic, Sabic, 2018](#) – *Halilbegovic S., Sabic E.* (2018). Attracting foreign direct investments in developing countries: Why Bosnia and Herzegovina should learn from China. *EcoForum Journal*, Vol. 7, Is. 3.
- [Landstar, INC](#) – Booking data received from Inmotion Ltd.
- [Pinedo, Seshadri, 1999](#) – *Pinedo M., Seshadri S.* (1999). Call Centers in Financial Services: Strategies, Technologies, and Operations.
- [Sato, 2018](#) – *Sato H.* (2018). Are call centers sweatshops? Research Gate.
- [Subbiah et al., 2018](#) – *Subbiah K., Ferrarini B., Maupin J., Hinojales M., Guhathakurta R., Kulshrestha S, Wright D.* (2018). The Age of Blockchain: A Collection of Article. IndraStra Open Access.
- [Tsai et al., 2016](#) – *Tsai W.T., Blower R., Zhu Y., Yu L.* (2016). A System View of Financial Blockchains. IEEE.
- [Wang et al., 2018](#) – *Wang R., Lin Z., Luo H.* (2018). Blockchain, bank credit and SME financing. Springer Nature.
- [Wexler et al., 2017](#) – *Wexler S., Shaffer J., Cotgreave A.* (2017). Call Center, Research Gate.