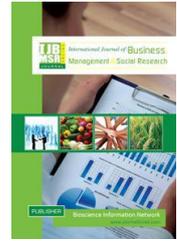


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## Student perceptions of digital currency

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### ABSTRACT

*As the business world continues to be shaken by the seismic sea changes in fiat currency, it is imperative that college business educators remain knowledgeable about these shifts regarding how the global marketplace has created, adopted, implemented, and is reacting to cryptocurrency, which has currently made end runs around most government regulatory schemes, and its undergirding, blockchain technology. These fluctuations are so significant that it would be a mistake for educators to turn a blind eye to this new decentralized monetary framework; thus, there exists a fierce urgency to introduce and teach the framework to business students. Otherwise, business faculty members risk their pupils falling behind in this burgeoning economic space that presently offers new and varied pathways to wealth. To begin the cryptocurrency educational narrative, the researchers determined that it was essential to measure the students' awareness of the medium prior to teaching the relevant material. With that said, this research was primarily guided by this seminal question: Do students taking this Cyber Business Law class know what cryptocurrency is, and if so, what is the extent of that knowledge? To help answer this, a survey instrument was designed and presented to the Cyber Business Law class via Survey Monkey. The data gleaned from this nascent study was then analyzed and interpreted through the lens of a qualitative systemic review. Blanket interpretations of the information revealed that the students were, for the most part, generally aware of this new technology; were more familiar with one cryptocurrency coin, Bitcoin, than other coin options; and were modestly comfortable purchasing lower-cost consumables with the medium. The researchers also discovered that for the last question of the instrument, which posed several value judgment questions to be answered on a Likert scale, the majority of the surveyed students preferred to remain neutral which likely was evidence that the topic of cryptocurrency is still relatively new to the participants, and no opinion could yet be formed by the survey taker. The next step to address in the research is to determine the extent business and industry stakeholders are gravitating to this innovative technology. For those gravitating towards the use of the technology, the research will also seek to discover what the company's familiarity requirements, if any, regarding cryptocurrency, and possibly blockchain, are. Ascertaining said information would help strengthen the Cyber Business Law course as well as other classes in the School of Business.*

**Key Words:** Students' perceptions, Education, Cryptocurrency, Bitcoin and Blockchain**Cite Article:** Horton, E., Parker, C. and Pharris, L. (2018). Student perceptions of digital currency  
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## I. Introduction

An intense silence falls as the fifteen juniors and seniors hear the unmistakable sound of their instructor's hard heeled boots fast approaching the doorway to the classroom. It was no mystery that the expectations for this class were high, and, as a requirement to graduate, there was no way around, only through. As interesting as the subject of Cyber Law sounded when registering for the class, the experience was already living up to the fore warnings of their friends and faculty advisors. And even while swearing to do a better job of warning their friends than others had done for them, they had no idea how they could adequately describe this course—this instructor—to someone who had not experienced it first hand. As the footsteps got closer, books closed. Phones were checked and rechecked to make sure no interruptions would draw the powerful gaze of the instructor. With the footsteps reaching the door, postures around the room became noticeably straighter. The game was about to begin. The instructor closed the door to her office. This past weekend, she met with several industry partners to discuss the importance of preparing students for entry into the workforce. The meeting affirmed what years working in a corporate environment had already taught her. Upon graduation, students would be met with the harsh reality that “hand-holding” was over. Not only did hiring managers not have time to coddle a new employee to get him up-to-speed, but also, if a student said they had the education and background to work in a job, business partners trusted and expected them to hold their own upon hire. Briskly walking across the hallway, the instructor also began to think of some of the current events related to Cyber Law. It seemed as if everywhere she looked, she saw Bitcoin and its revolutionary blockchain technology permeating the news and social media. Yet, in her academic circles, very little had come up in conversation. As a law professional, cryptocurrency was hot primarily because it remains unregulated. As a business professional, businesses were only beginning to scratch the surface to figure out whether any true value comes from using cryptocurrency. It was becoming essential to determine whether this craze was a passing fad or changing the face of business. Yet, even if cryptocurrency mania passed, businesses were already hiring people to investigate how blockchain technology might be used for competitive advantage. Knowing that the majority of her class consisted of CIS majors who were about to join the workforce, it was imperative that each one fully grasp how cryptocurrencies and blockchain technology are transforming the world of work and how those changes will impact them and their place of business. With a renewed sense of urgency, the instructor stepped into the room and appraised her students, thinking, “I will not let you down. You will not go into industry without this knowledge.”

### Problem and Purpose

The specific problem addressed in this study is to what extent students understand cryptocurrency and cryptocurrency's influence on society, business and industry. The purpose of this phenomenological qualitative study is to explore student knowledge on cryptocurrency. This study contributes to the current body of research by determining whether students enrolled in a traditional, 16-week Cyber Business Law course possess familiarity with several basic cryptocurrencies or feelings of security related to using cryptocurrency technology.

## II. Literature Review

### Widespread adoption

**Rising demand:** Digital currency usage is on the rise. Watchers of Bitcoin, the digital currencies, continuously regard the highly volatile transaction volume with wonder, often questioning how long the steady rise might last (Kumar, 2017). In fact, researchers and business professionals have begun to question whether digitization is the future of currency. One of the most commonly used phrases scattered across headlines calls the phenomenon surrounding the adoption of cryptocurrencies a ‘fever’ (Lewis and Dunkley, 2017; Domm, 2017; Kelly and Irrera, 2017). As of November 2017, the number of Bitcoin transactions averaged around 12,000 per hour (Sedgwick, 2017). Moreover, while Bitcoin is the most traded cryptocurrency, there are over 1500 known cryptocurrencies, with 24 valued over one billion US\$ and 136 valued at over 100 million US\$ (Coinmarketcap.com, 2018). How people perceive technology plays a critical role in the extent a technology is adopted across a society (Schwarz et al. 2009). Thus, understanding the enthusiastic embrace of digital currencies by the public starts with a foundational knowledge related to the history of cryptocurrency.

**History:** Cryptocurrency history truly begins when alias Satoshi Nakamoto published a white paper in 2008 for a system of payment where transactions are verified through a system of peers instead of the traditional third-party verification such as a bank (Low and Teo, 2017). From this white paper the idea of Bitcoin was born, the first in what is now a list of hundreds of cryptocurrencies. While Bitcoin has been, by far, the most recognized of the cryptocurrencies, the identity of its founder has remained a mystery. In 2014, Newsweek released an article saying they had found the creator, an engineer in California by the name of Dorian Satoshi Nakamoto (Goodman, 2014). Reporters swarmed his house and followed him relentlessly, even as he denied any involvement with the project or even knowledge of cryptocurrency (Clinch, 2014). Shortly after the Newsweek story made headlines, the Reddit community, a very popular online news and link aggregation service, disproved the Newsweek report by determining what Nakamoto was up to at the exact moment of the release of the Bitcoin Whitepaper. Rather than fathering digital currency, as suggested, Nakamoto was actually posting to a model train website. The creator and first user of cryptocurrency still remains a mystery as of this writing. As can be seen, cryptocurrency offers users of this technology the ability to remain anonymous, despite the best efforts of journalists and other who might wish to circumvent the security and protocols it provides.

**How cryptocurrency works:** Each cryptocurrency uses a different algorithm and hashing function, but all focus on the same idea of a decentralized currency and privacy (Lewis, 2015). If an individual owns Bitcoin or any other digital currency, what this person actually possesses is a coin address and a private cryptographic key. This address and key combination is collectively known as a wallet. A person may own as many wallets as you like, similar to how someone might open multiple email or bank accounts. To transfer coins, an individual must have both the address and the private key, but to receive coins all that is needed is the public address. Unlike a traditional password, cryptocurrency does not allow anyone to change of the private key. However, if a key is thought to be compromised, a new wallet can quickly be created and the balance of coins in the wallet can easily be transferred.

**Identifiable information:** The major difference between the cryptocurrency ledger and the traditional bank ledger, however, is that a cryptocurrency wallet is not tied to an account, email address or any other personally identifiable information (Lewis, 2015). Traditional banks, even if the ledger only includes account numbers, can then tie those accounts back to individuals by cross-referencing the accounts in other databases.

**Mining:** While other forms of electronic transactions and 'electronic money' have been investigated prior to the success of Bitcoin and other more recent cryptocurrencies, all relied on two things: a hard currency, such as the US dollar, and a transaction processor, for instance PayPal, Visa, or any other banking institution. Cryptocurrencies utilize a process known as mining (Cocco and Marchesi, 2016). When a transaction occurs with Bitcoin, the transaction itself is public and is stored in a distributed database known as a blockchain.

**Blockchain technology:** The goal of blockchain technology is to provide its users with security, privacy, anonymity and transparency, all very relevant needs that must be met by any business that expects to operate in the digital economy (Yli-Huumo et al. 2016). Additionally, understanding the role of blockchain technology as a middleman offers opportunities for businesses to reinvent digital interactions, similar to how it has reinvented the role of money for digital transactions (Sun et al. 2016).

### Skills Gap

**Industry:** As new technologies gain momentum, businesses often scramble to find ways to adopt that technology, so they can take advantage of the new capital it often brings. This leads to many industries quickly looking to hire talent with knowledge in those areas. The jobs related to blockchain and Bitcoin are emerging as opportunities within the IT sector. These jobs can include developers, security analysts and researchers. The Bureau of Labor Statistics (BLS) Occupational Outlook Handbook for 2016-2026 shows the median pay for jobs in these fields range between \$79,000 and \$111,000. All of these fields show growth from 19% to 28% over that ten-year span of time. Consequently, as industry begins to use cryptocurrencies and the blockchain, lack of employees with the proper skills can lead to serious security consequences (Rafferty, 2016). New technologies bring with them new challenges to information security and cryptocurrencies are no exception.

While industry is quick to adopt where money can be made, there is also some reservation when it comes to a disruptive technology. Blockchain or cryptocurrencies themselves are considered disruptive technologies in that it has the potential to displace other things in place, especially those to do with banking and finance (Speed, 2016). While this may never come to fruition, technologies like Bitcoin have the potential to completely replace traditional banking and credit cards.

**Student knowledge:** As with any college curriculum, the major purpose behind offering coursework is to provide graduates with the skills they need to ultimately find lucrative jobs in their field of interest (Selingo, 2016). It is indeed a conundrum for graduates that employers require experience and familiarity with technologies used in the field, yet the new graduate often has no experience beyond that which they may have earned through an internship. While previous studies have focused on closing the skills gap between students and industry needs in nursing (Scully, 2011), international business (Lao et al. 2018) and education (Moore and Morton, 2017), the literature is lacking in studies specifically related to blockchain and cryptocurrencies. Other studies have indicated that closing the skills gap leads to increased employability upon graduation, thereby supporting the need to augment student knowledge prior to graduation in these fields (Lowry and Thomas-Anderson, 2017).

### III. Materials and Methods

#### Data Collection

To collect data related to student knowledge about cryptocurrency, the researchers designed a survey instrument using the survey development application, SurveyMonkey. The course instructor placed a direct survey link within an online Moodle course shell to allow students access to the survey. The administration of the surveys occurred as part of regular class proceedings. At the beginning of class, students were escorted to a computer lab to fill out the survey. Upon completion of the survey, students returned to their regular classroom. Researchers were present to assist with any potential technical issues during the survey administration, but they did not interfere or provide additional assistance or oversight related to how students responded to the survey. Of the 15 students surveyed in BUSI3280 Cyber Business Law, all 15 students responded to all survey questions, including subcomponents of each survey question. All responses are included in the analysis. All participants in the survey were ages 18 and over. Of the 15 participants, eleven were ages 18-24, and four were age 25 or older. The survey respondents consisted of eleven Computer Information Systems majors, two Business Administration majors, one Mass Communications major and one Music Business major.

### IV. Results and Discussion

#### Generally aware

Table 01 presents student definitions for the term cryptocurrency. Table 01 shows that no student participants completed this survey having never heard the term *cryptocurrency* before. Furthermore, Table 01 provides evidence that each student already held a general understanding related to what the topic entails. There are a few possible explanations for this.

**Previous exposure:** The explanations for the fact that all students possessed a general awareness related to the topic of cryptocurrencies center around direct or indirect exposure. Details about opportunities students may have been exposed to the topic follows.

**News and media coverage:** The extensive news and media coverage surrounding *cryptocurrency fever* may have already reached the students. Students may have directly acquired knowledge by reading an article or watching a documentary about the topic.

**Word of mouth:** Students may have gained knowledge about cryptocurrency by talking with other students, colleagues, parents or instructors.

**Business coursework:** CIS students take a variety of business courses in addition to discipline-specific coursework, therefore it is possible that students were exposed to cryptocurrencies in other classes outside of Cyber Business Law. For instance, cryptocurrencies has heavily influenced the financial

services industry, which may have led the Finance course instructor to touch on the topic during the semester.

**Table 01. Student definitions for the term cryptocurrency for (Q1), n 100 words or less, define the term “cryptocurrency”**

Encrypted digital currency, thought to be better for regulating global creation and distribution.
Cryptocurrency is a form of encrypted currency that has no "middle man" via banking institutions. The currency in the simplest form is made up of a series of 0's and 1's.
It is known as the Digital currency, in which bytes of information take the value of actual currency. This byte of information is available for purchase in exchange of a monetary value. Crypto means that it is encrypted, secure and untraceable to use all around the internet.
Cryptocurrency is like what bitcoin is.
Cryptocurrency is a digital form of currency that uses electronic methods to make digital transactions.
Internet currency that is protected online by means of encryption
Cryptocurrency, if I'm not mistaken, is digital currency that is usually handed out for doing little odd jobs like watching ads or other tasks. It converts into dollar amounts at different exchange rates.
An internet currency whose value is based upon the amount of it in circulation.
A digital currency which encryption techniques to regulate the generation of units.
Digital currency used with minimum restrictions and separate from banks
I would have to say that it is currency used on the web. Such as Bitcoins.
This is currency that is used on the Internet
Cryptocurrency is basically online currency
Currency used for online transactions. Currency must be mined first.
An internet currency.

**CIS coursework:** Moreover, as the majority of participants in the survey were Computer Information Systems students, the topic of emerging technologies, which includes cryptocurrencies, may have been covered as part of a Security or Introduction to CIS class. Students often enroll in these courses at the same time or before enrolling in BUAD3280, offering another potential explanation to student exposure to the topic prior to taking the survey.

**Lesson preparation:** It is not unusual for course instructors to lead into upcoming lessons with assignments that require students to adequately prepare for the discussion. As a result, students may have prepared for the lesson by researching the terms cryptocurrency and Bitcoin.

**First adopters:** A fourth reason is that students are often very technologically savvy, and tend to be first-adopters of new technology. It would not be unexpected for students to already utilize banking and money management applications to transfer money electronically. Students may have run across BitPay or other cryptocurrency payment option, since these are becoming more prevalent.

**Access to definitions:** Finally, it is possible that students had the opportunity to research the definition of cryptocurrency during the survey prior to entering the definition for cryptocurrency to Q1. Since the survey was administered to students in an online environment, the ability of the students to access external websites was not controlled. Although researchers were present for technical assistance during the class, they did not expressly interfere with or monitor participants as they responded to survey questions. It is unknown if controlling for this variable would have changed the responses to Q1.

**Cryptocurrency familiarity:** Table 02 shows the familiarity of students with specific cryptocurrencies. Of the eight cryptocurrencies in Q2, student were most familiar with Bitcoin. Yet of fifteen students, only four indicated they were “Extremely familiar” with Bitcoin as a cryptocurrency. The majority of student responses for all other cryptocurrencies, including Dash, Dogecoin, Ethereum, Litecoin, MaidSafe, Monero and Ripple, was “Never heard of” followed by “Barely familiar.” These results align with research showing the popularity of Bitcoin as a digital currency (Domm, 2017; Kelly and Irrera, 2017).

The results also reveal, that although every student provided appropriate definitions for the term cryptocurrency, being able to define the term did not necessarily indicate “familiarity.”

**Table 02. Student familiarity with specific cryptocurrencies for (Q2), On a scale of 1 (never heard of) to 5 (extremely familiar), please rate how familiar you are with each cryptocurrency**

	1 (Never heard of)	2 (Barely familiar)	3 (Somewhat familiar)	4 (Fairly familiar)	5 (Extremely familiar)	Total
Bitcoin	6.67% 1	6.67% 1	20.00% 3	40.00% 6	26.67% 4	15
Dash	46.67% 7	33.33% 5	0.00% 0	13.33% 2	6.67% 1	15
Dogecoin	60.00% 9	26.67% 4	13.33% 2	0.00% 0	0.00% 0	15
Etherum	73.33% 11	20.00% 3	6.67% 1	0.00% 0	0.00% 0	15
Litecoin	73.33% 11	26.67% 4	0.00% 0	0.00% 0	0.00% 0	15
MaidSafe	73.33% 11	26.67% 4	0.00% 0	0.00% 0	0.00% 0	15
Monero	80.00% 12	13.33% 2	0.00% 0	0.00% 0	6.67% 1	15
Ripple	86.67% 13	6.67% 1	0.00% 0	0.00% 0	6.67% 1	15

**Purchase Comfort**

Table 03 looks at the comfort level of students as related to using cryptocurrency to make a purchase. It is interesting to note, the survey responses indicate that students already perceive some form of value associated with cryptocurrency. When more cryptocurrency is on the line, fewer students feel comfortable using it to make a purchase. When less cryptocurrency is on the line, more students indicated they would be “Somewhat comfortable” using a form of cryptocurrency to make a minor purchases.

**Table 03. Student comfort level related to using cryptocurrencies for (Q3), on a scale of 1 (not at all) to 5 (very comfortable), please rate how comfortable you are with the following statements**

	1 (Not at all)	2 (Somewhat uncomfortable)	3 (Neutral)	4 (Somewhat comfortable)	5 (Very comfortable)	Total
I would use a form of cryptocurrency to make a minor purchase (ie. food, clothing).	3	1	4	6	1	15
I would use a form of cryptocurrency to make a major purchase (ie. car, large appliance).	5	4	3	3	0	15

**Low risk preference:** As Table 03 shows, only one student indicated they would be “Very comfortable” making any purchase (minor or major) using some form of cryptocurrency. A majority of students suggested they were “Not at all” comfortable or “Somewhat uncomfortable” with the idea of using cryptocurrency to make a major purchase. These results seem to align with the lack of familiarity held by students. According to Trautmann et al. (2008), ambiguity, or “the unknown” influences people’s decision-making. People tend to prefer less risk, and in this situation, students unfamiliar with how cryptocurrency works are likely to perceive making a high-dollar purchase to be a very risky proposition.

**Willingness to learn:** The willingness of students willing to use cryptocurrency to make minor purchases may also imply a willingness of students to venture forth to learn and eventually adopt cryptocurrency in the future. This could suggest that someone who is able to successfully test a cryptocurrency in low risk situations may eventually shift their comfort levels for using cryptocurrency for both minor and major purchases. Additionally, the willingness of students to learn more about cryptocurrency may be considered a positive indicator for the willingness of students to help businesses learn how to get the most value from digital currencies as they become more widely adopted.

### Common cryptocurrency knowledge

**Neutral response:** Responses to Q4 in [Table 04](#) may provide more information related to specific areas that may influence the feelings of familiarity by students with cryptocurrencies. Statements in Q4 were designed to elicit whether students could correctly identify some very basic, commonly known facts about cryptocurrencies. These statements address the primary use, volatility, security, and value of cryptocurrencies. Largely, students chose the neutral answer. In three of the four statements, the majority of students selected the neutral “Neither agree nor disagree” option. In the statement about the primary use of cryptocurrency, the top student responses were evenly divided between the neutral “Neither agree nor disagree” option and the “Somewhat disagree” response.

**Table 04. Student responses to cryptocurrency facts for (Q4), on a scale of 1 (completely agree) to 5 (completely disagree), please rate how closely you agree or disagree with the following statements**

	1 (Completely agree)		2 (Somewhat agree)		3 (Neither agree nor disagree)		4 (Somewhat disagree)		5 (Completely disagree)		Total
The primary use of cryptocurrency is for illegal activities.	6.67%	1	20.00%	3	33.33%	5	33.33%	5	6.67%	1	15
Cryptocurrency is less volatile than other currencies.	6.67%	1	20.00%	3	66.67%	10	6.67%	1	0.00%	0	15
Cryptocurrency is safe.	6.67%	1	13.33%	2	46.67%	7	33.33%	5	0.00%	0	15
I trust the value placed on cryptocurrency.	6.67%	1	20.00%	3	60.00%	9	13.33%	2	0.00%	0	15

**Need for education:** Given that each statements could be reasonably answered given the appropriate foundational knowledge, it can be inferred that most students chose not to formulate a “best guess” and instead opted to remain neutral, because they did not feel they had enough information to formulate a better response. The neutral responses suggest that students need more education about cryptocurrency. It would be reasonable to expect that as students gain the ability to appropriately identify correct, non-neutral responses to these four statements, their feelings of familiarity about cryptocurrencies will shift along the continuum. Although increasing the foundational knowledge about cryptocurrency, a change in knowledge may not necessarily indicate any change in whether a student would feel comfortable making purchases.

**Implications:** Although all participants in the study were able to provide a simple explanation or definition for the term cryptocurrency, the survey responses revealed that the majority of participants did not possess more than shallow knowledge related to the subject. Participants disclosed limited familiarity with most types of cryptocurrencies, and the results of the study uncovered a hesitancy, or lack of comfort, by students to use any form of cryptocurrency for making purchases. This wariness coupled with the disclosed lack of familiarity suggests that students do not possess the appropriate knowledge to make educated decisions about the risks associated with cryptocurrency.

The results of the research effort signifies an opportunity for higher educational institutesto teach students about cryptocurrency and the emerging blockchain technology. Although this study was limited to a single instance of a Cyber Business Law class, the speed at which cryptocurrencies are being embraced demands that students understand what cryptocurrency is, where it came from, how it is being used, and how it is impacting society, locally, nationally, and internationally ([Sedgwick, 2017](#)). To address this growing demand for employees who are knowledgeable about cryptocurrency and its related uses within business and industry, it is recommended that university Business and Technology programs, specifically Computer Information Systems programs, introduce and incorporate the topic of cryptocurrency and blockchain technology throughout the curriculum. Incorporating these topics into relevant program curricula responds to gaps between educational programs and industry needs ([Hanson et al. 2011](#)), while paving a way for students to successfully enter industry because they applicable skills and knowledge to make an immediate impact on the hiring firm upon graduation.

## V. Concluding remarks

Analysis of the Cyber Business Law course data seems to convey the notion that the students were in fact for the most part, knowledgeable, albeit perfunctory, about cryptocurrency. Information gathered also appears to indicate that the students have been introduced to this emerging mode of trade, but are in need of additional tools to expand their understanding of the new technology that is presently dominating the commercial sector. As such, studying cryptocurrency technology at the collegiate level has moved from a mere thought to an affirmative action due to the steady drumbeat of cryptocurrency in the financial news. The business paradigm must adapt to ensure that the current business students are properly equipped for the workforce.

To do this, business educators will need to embrace cryptocurrency as this research study investigates an area that had not yet been explored in academia—the influence of cryptocurrency on students, the workforce of tomorrow. Our examination provides the basis for supplementary research related to cryptocurrency, higher education, students, and industry. One area this study did not address is whether a change in student perceptions resulted following their participation in classroom activities and lectures.

Accordingly, as courses begin to incorporate more information about cryptocurrency and blockchain technology, follow up studies could examine whether any marked difference exist between survey responses before and after specific educational interventions for a particular participant group. Several of the student responses indicated a wariness or lack of willingness to use digital currencies for purchases. Numerous factors have been identified as influential in the adoption of new technology (Schwarz et al. 2009). This study uncovers an opportunity to investigate which of these factors plays the most significant role on the willingness to adopt cryptocurrency by various groups and individuals. Lastly, one important limitation of this study was constraining the surveyed population to a single Cyber Business Law class. Opportunities exist to expand the participant population or replicate the study with a different population.

## VI. References

- [1]. Clinch, M. (2014). 'Real' bitcoin creator: 'I am not Dorian Nakamoto.' CNBC. Retrieved by <https://www.cnb.com/2014/03/07/real-bitcoin-creator-i-am-not-dorian-nakamoto.html>
- [2]. Cocco, L. and Marchesi, M. (2016). Modeling and simulation of the economics of mining in the bitcoin market. PLoS ONE, 11(10), 1–31. <https://doi.org/10.1371/journal.pone.0164603> PMID:27768691 PMCID:PMC5074464
- [3]. Coin Market Cap (2018). Cryptocurrency market capitalizations: All cryptocurrencies. Blockchain Terminal. Retrieved from <https://coinmarketcap.com/all/views/all/>
- [4]. Domm, P. (2017). Bitcoin fever is drawing investors into the stock market Laszlo Birinyi says. Market Insider. Retrieved from <https://www.cnb.com/2017/12/19/bitcoin-fever-is-drawing-investors-into-the-stock-market-laszlo-birinyi-says.html>
- [5]. Goodman, L. M. (2014). The face behind bitcoin. Newsweek. Retrieved from <http://www.newsweek.com/2014/03/14/face-behind-bitcoin-247957.html>
- [6]. Hanson, B., Hanson, T., Perez-Mira, B., Kilcoyne, M. and Champion, S. (2011). Walking out the door--do business graduates have the information technology skills they think they do. Association of Business Information Systems, 1-6.
- [7]. Kelly, J. and Irrera, A. (2017). Bitcoin fever exposes crypto-market frailties. Reuters. Retrieved from <https://www.reuters.com/article/uk-markets-bitcoin-risks-insight/bitcoin-fever-exposes-crypto-market-frailties-idUSKBN1E724X>
- [8]. Kumar, P. (2017). Bitcoin as digital money: Its growth and future sustainability. Theoretical & Applied Economics, 24(4). Retrieved from <http://store.ectap.ro/articole/1306.pdf>
- [9]. Lao, W., Kilcoyne, M., Hardy, M. and Parker, C. (2018). Does our course content meet the employers' needs? An exploratory study specifically related to international business in Louisiana. International Journal of Business, Management, and Social Research, 04(02), 229-239. <https://doi.org/10.18801/ijbmsr.040218.26>
- [10]. Lewis, A. (2015). A gentle introduction to bitcoin. Bits on Blocks. Retrieved from <https://bitsonblocks.net/2015/09/01/a-gentle-introduction-to-bitcoin/>

- [11]. Lewis, L. and Dunkley, E. (2017). Japan and South Korea at heart of cryptocurrency fever. *Financial Times*. Retrieved from <https://www.ft.com/content/384936ac-e70c-11e7-97e2-916d4fbac0da>
- [12]. Low, K. F. and Teo, E. G. (2017). Bitcoins and other cryptocurrencies as property? *Law, Innovation & Technology*, 9(2), 235–268. <https://doi.org/10.1080/17579961.2017.1377915>
- [13]. Lowry, K. and Thomas-Anderson, T. (2017). How community colleges are closing the skills gap through CTE and STEM funding innovations. *New Directions for Community Colleges*, 2017 (178), 45-54. <https://doi.org/10.1002/cc.20252>
- [14]. Moore, T. and Morton, J. (2017). The myth of job readiness? Written communication, employability, and the ‘skills gap’ in higher education. *Studies in Higher Education*, 42(3), 591-609. <https://doi.org/10.1080/03075079.2015.1067602>
- [15]. Rafferty, B. (2016). Feature: Dangerous skills gap leaves organizations vulnerable. *Network Security*, 11-13. [https://doi.org/10.1016/S1353-4858\(16\)30077-0](https://doi.org/10.1016/S1353-4858(16)30077-0)
- [16]. Sedgwick, K. (2017). Bitcoin by numbers: 21 statistics that reveal growing demand for the cryptocurrency. Retrieved February 11, 2018, from <https://news.bitcoin.com/bitcoin-numbers-21-statistics-reveal-growing-demand-cryptocurrency/>
- [17]. Schwarz, A., Wiley-Patton, S., Schwarz, C., Perez-Mira, B. and Jung, Y. (2009). An investigation in to virtual world adoption. *MG 2009 Proceedings*, 18. Retrieved from <http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1017&context=mg2009>
- [18]. Scully, N. J. (2011). The theory-practice gap and skill acquisition: An issue for nursing education. *Collegian*, 1893-98. <https://doi.org/10.1016/j.colegn.2010.04.002>
- [19]. Selingo, J. J. (2016). How to fill the skills gap for new college grads who don't have work experience. *The Washington Post*. Retrieved from <https://www.washingtonpost.com/news/grade-point/wp/2016/06/29/how-to-fill-the-skills-gap-for-new-college-grads-who-dont-have-work-experience/>
- [20]. Speed, B. (2016). How to spend it: Ethereum, a new competitor to Bitcoin, could transform entire industries. *New Statesman*, 5309, 20.
- [21]. Sun, J., Yan, J. and Zhang, K. Z. K. (2016). Blockchain-based sharing services: What blockchain technology can contribute to smart cities. *Financial Innovation*, 2(1), 1-9. <https://doi.org/10.1186/s40854-016-0040-y>
- [22]. Trautmann, S. T., Vieider, F. M. and Wakker, P. P. (2008). Causes of ambiguity aversion: Known versus unknown preferences. *Journal of Risk and Uncertainty*, 36(3), 225-243. <https://doi.org/10.1007/s11166-008-9038-9>
- [23]. U. S. Department of Labor, Bureau of Labor Statistics (2016). Computer and information technology occupations. *Occupational Outlook Handbook 2016-26*. Retrieved from <https://www.bls.gov/ooh/computer-and-information-technology/home.htm>
- [24]. Yli-Huumo, J., Ko, D., Choi, S., Park, S. and Smolander, K. (2016). Where is current research on blockchain technology? A systematic review. *PLoS One*, 11(10). <https://doi.org/10.1371/journal.pone.0163477>  
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