

Bitcoin's Pygmalion Effect: Social Entrepreneurs are a Bit-Curious in Marketing a Special Kind of Property!

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ABSTRACT

Entrepreneurs enter new markets to find high-growth areas. Bitcoin is a cryptographic, software networked, complexly engineered, high energy consuming, permission-less and programmable crypto-currency. Bitcoin appears to be in higher demand among social entrepreneurs than customers resulting in a Pygmalion Effect. The purpose of the study is to examine three main questions: (1) Will Bitcoin's marketing gain a sustainable traction as a currency of choice for daily transactions? (2) Will Bitcoin scale to become a major payment network on a global scale? (3) Will Bitcoin be replaced by multiple viable crypto-currencies? The study explored how Bitcoins Pygmalion effect will impact consumer's privacy, purchasing-habits and business-relationships with cross border payments within the framework of crypto-currency. This study draws on the works of Reither et al. (2017), Yates (2017), Ortisi et al (2016), Bert and Chris (2017), Reijers (2016), Houy and Nicholas (2014). The research method of the study is based on the quality content analysis and primarily relied on the recent research articles, and surveys. The findings contribute to the existing discussion on the Bitcoin mining and the marketing of the cryptographic tokens and block-chain technologies. This study posits that bitcoin has value because both the Pygmalion entrepreneurs and customers believe that it has value and it is likely to be among mainstream global viable currencies. The final sections provide directions for future research on how crypto-companies need to build their distinct message and project it into the larger block-chain conversation for social entrepreneurs. Key implications for researchers, practitioners and policy makers are highlighted.

KEYWORDS - Bitcoin, Pygmalion, Tokens, Blockchain, Entrepreneurship, Crypto-currency, Game Theory, Mining, Payment Channel, Privacy.

BACKGROUND OF THE STUDY

Harvard psychologist Robert Rosenthal (1962) revealed a potential blooming philosophy of high expectations and positive reinforcement for every child in school. It was a big bet on a new idea: Pygmalion effect. This study posit that Bitcoin is a big bet on a new idea for blooming digital payment systems.

Stanford Professor Livingston (2003) argued that most parents are aware that teachers' expectations about individual children become self-fulfilling prophecies: If a teacher believes a

child is slow, the child will come to believe that, too, and will indeed learn slowly. The lucky child who strikes a teacher as bright also picks up on that expectation and will rise to fulfill it. Similarly, Bitcoin is riding high on the Pygmalion effect, Fig. 1:

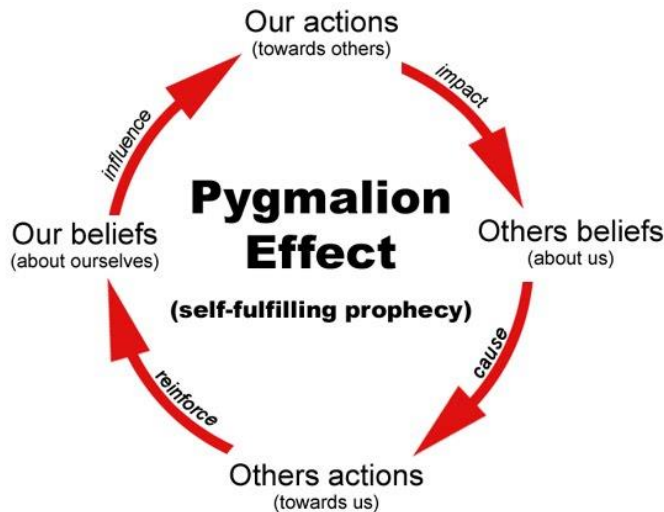


Figure 1: Bitcoin's "Pygmalion Effect" - (Courtesy: <https://www.pinterest.com/explore/self-fulfilling-prophecy/>)

Nambisan (2017) highlighted that new digital technologies have transformed the nature of uncertainty inherent in entrepreneurial processes and outcomes as well as the ways of dealing with such uncertainty. This has raised important questions at the intersection of digital technologies and entrepreneurship-on digital entrepreneurship. In articulating the promise and value of such a digital technology perspective this study argues how it would build on and enrich the social entrepreneurship model for crypto-currencies such as Bitcoin, Ethereum, Litecoin, Ripple, Dash, Monero, NEM, and Stratis market.

Munoz (2016) argued that the ubiquity of new technologies, and collaborative business models-are fostering a new form of entrepreneurship. The social entrepreneurs are challenging the logic of formal market structures and particularly traditional financial institution systems and hence the rise of cryptographic payment systems.

As Heimer (2017) argued that the lack of a regulatory road map has kept big financial institutions and asset managers from investing in cryptocurrencies. New products may remove those hurdles, and bitcoin's value could grow by many more multiples as Wall Street joins the fray. Moreover, many Bitcoin customers believe it will become a true global currency, one that you could spend the same way as they use Visa or MasterCard today and if and when it does, it might be the end of Bitcoin's huge price surge; for the digital coin to be useful as a currency, its value would have to stabilize. The price drops-off or more have been routine for Bitcoin. Although Bitcoin is the oldest and most valuable cryptocurrency, but a crop of nimble competitors, including Ethereum and Bitcoin Cash are gaining ground.

SIGNIFICANCE AND CONTEXTUAL CONTRIBUTION OF THE STUDY

The significance of the study from a marketing perspective is that where Wall Street was once a united front (Pollock, 2017) in running the financials of America, and to an extent, the rest of the world, it is suffering a polarization as Bitcoin disrupts opinions. However, in Japan, more businessmen are investing in bitcoin (Jenn, 2018) since the government has already recognized the cryptocurrency as legal tender in 2017. The New York Stock Exchange has filed (Jenkinson, 2018) with the United States Securities and Exchange Commission for permission to launch a number of Bitcoin-related exchange-traded funds (ETF) showing that there is plenty of interest in Bitcoin by Wall Street money. Once a number of ETFs and trading options become available there could be a change in sentiment by financial institutions whose clients are looking to enter the cryptocurrency market. The remarkable rise of cryptocurrencies is drawing a response from regulators. Governments are increasing their scrutiny of cryptocurrencies, mixing tough rhetoric (Russolillo, Shi, Tai, Peuple, 2018) about the risks involved with, in some cases, new rules around trading and fundraising. This study posits that the demand for the Bitcoin's will remain supported and that the uptrend is more likely to continue than to reverse as more investors will have easier access to the cryptocurrency.

The public distrust in geopolitical institutions and the aftermath of the 2009 financial crisis has led to more investment in Bitcoin and a rise in its valuation. As Hackett and Wieczner (2018) argued if Bitcoin, in its evolution, acquires more compelling utility—making cross border payments cheap and fast for example, or enabling smart contracts that encode business relationships and automatically disburse payments—those who own stakes in the finite currency could find other would-be users, possibly even deep-pocketed corporations, clamoring to buy from them. For many, this is reason enough to play the long game.

PROBLEM STATEMENT

The widespread use of Internet, Web, and mobile technologies, a new category of applications and transactions that requires anonymity (Muftic, 2016) are gaining increased interest and importance. This study explores such applications and transactions of cryptocurrencies and block-chains and why it is likely to propel to become one of the mainstream global currencies and a global payment system.

RESEARCH OBJECTIVE

The main objective of this study is to investigate why Bitcoin appears to be in higher demand among social entrepreneurs than customers resulting in a Pygmalion Effect. Therefore, the specific purpose of the study are as follows:

- (1) Will Bitcoin's marketing gain a sustainable traction as a currency of choice for daily transactions?
- (2) Will Bitcoin scale to become a major payment network on a global scale?
- (3) Will Bitcoin be replaced by multiple viable crypto-currencies?

THEORITICAL APPROACH AND RESEARCH METHODOLOGY

This study used the quality content analysis methodology and relied on the recent research articles and digital analytics surveys. This research follows qualitative, descriptive approach and general analytical strategy and is based on theoretical propositions. This study argues that an in-depth analysis of the digital content seems to be an attractive alternative to traditional research methods because data is already available and, at first glance, only has to be analyzed. In this study, Social Media research provided valuable additional insights, e. g. ideas, explanations and backgrounds for the initial results. Using the quality content analysis procedure, this study is primarily built upon recent case studies, research articles, and surveys. This research study also shows the advantage of mixing traditional research methods (research articles, surveys, and case studies) with the analysis of existing Social Media (Faber, Eihorn, Hofmann, & Loeffler, 2012) content by identifying additional insights which complement traditional research results. The approach of creating additional value by analyzing existing data focuses on innovative and creative insights (Faber, Eihorn, Hofmann, & Loeffler, 2012) when addressing the main argument examined by this research study—Will Bitcoin’s marketing gain a sustainable traction as a currency of choice for daily transactions?

Blockchain Capital Bitcoin Survey 2017

In light of an increased exposure a survey of over 2,000 adults was conducted online within the United States by The Harris Poll on behalf of Blockchain Capital from October 18-20, 2017 among 2,112 U.S. adults, ages 18 and above. The findings of the survey is as follows:

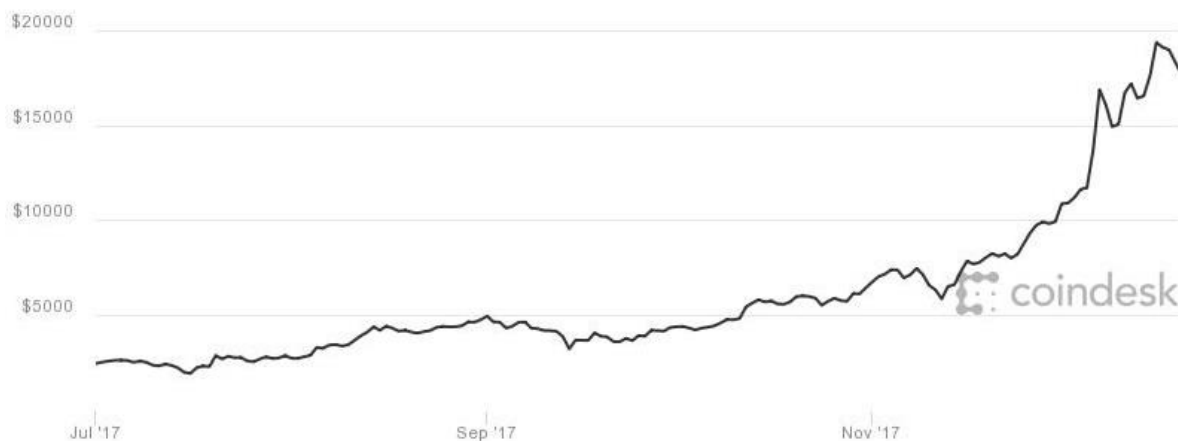
- 30% of Millennials prefer \$1k of Bitcoin over \$1k of Government Bonds.
- 43% of Millennials are familiar with Bitcoin, compared to 5% among those ages 65+.
- 48% of Millennials agree that Bitcoin is a positive innovation in final technology.
- 27% of Millennials think Bitcoin is more trustworthy than big banks.
- 43% of Millennials agree that most people will be using Bitcoin in the next 10 years.
- 41% of male Millennials are likely to buy Bitcoin in the next 5 years.

LendEdu Bitcoin Survey 2017

LendEdu polled 565 Americans ages 18 and above between November 9 and November. 13, 2017 conducted online by Pollfish. De (2017) indicated that the most bitcoin investors in the United States are expecting the cryptocurrency to perform better in coming years. While bitcoin started 2017 hovering just below \$1,000, it was trading at more than \$16,500 with highs above \$17,000 as of December 14, 2017 before dropping below \$12000 according to CoinDesk's Bitcoin Price Index (BPI). The findings of the survey is as follows, Fig. 2:

- 77% of participants believe bitcoin's price will grow.
- 75% of investors plan to increase the size of their investments in bitcoin, with less than 10% not planning to.
- 31.5% of respondents plan to sell at least some of their bitcoin with 40% stating they would not and 28.5% were unsure.

- 51%, said they would make at least one physical purchase using the cryptocurrency, while 30% were unsure if they would or not.
- 50% of respondents said they would not like to see more regulation, while 30 percent of respondents said they would like to see more regulation.



• **Figure 2. Bitcoin performance (July 2017 to December 2017) – (Courtesy – Coindesk.com)**

US Chief Financial Officer Survey 2017

The CNBC Global Chief Financial Officer (CFO) Council was asked for its view on bitcoin — U.S.-based members were the most skeptical. Billionaires and business barons who have called it a bubble — including Jamie Dimon, Jack Bogle, Warren Buffett and Mark Cuban.

- 27 percent of the respondents see bitcoin as fraud
- 27 percent said it is a "real" asset, but in a bubble.
- 14 percent say it is "real and still going higher" in value.

The CNBC Global CFO Council represents some of the largest public and private companies in the world, collectively managing more than \$4 trillion in market capitalization across a wide variety of sectors.

Bank of America Merrill Lynch Survey 2017

Cheng (2017) reported that Bitcoin tops the list of "most crowded trades" a measure of sentiment on which a popular investment could quickly reverse its gains in Bank of America Merrill Lynch's December 2017 survey conducted from December 8 to 14, covering 172 global fund managers with a total of \$480 billion in assets under management, Figure 3. It's widely considered one of the best surveys of investors conducted on Wall Street. .

FAANG, or Facebook, Amazon.com, Apple, Netflix and Google's parent, Alphabet, are each up nearly 37 percent to 60 percent in 2017 versus the S&P 500's 20 percent gain. The findings of the survey are as follows:

- 32 percent of respondents named bitcoin as the most crowded trade, up from 26 percent in September 2017 when the digital currency first led the

list.

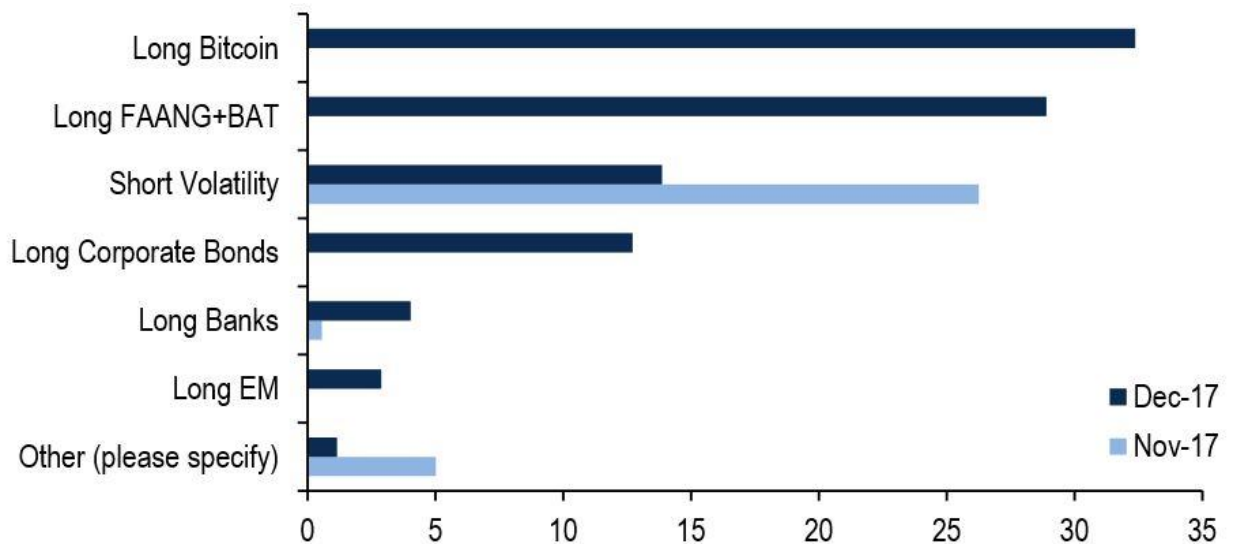


Figure 3. Bank of America Merrill Lynch, November Fund Manager Survey (Courtesy: CNBC.com)

Centre for Macroeconomics and the Centre for Economic Policy Research Survey 2017

Partington and Killewe (2017) reported that Bitcoin poses no threat to financial stability and is unlikely to rattle mainstream markets. According to a survey of almost 50 academics from universities across Europe by the Centre for Macroeconomics and the Centre for Economic Policy Research, the majority are sanguine about the risks posed by the digital currency despite repeated warnings by senior financiers.

Although the majority of economists believed there were limited risks to financial stability, they also said governments should introduce greater controls for cryptocurrencies as their anonymity and opacity could help enable tax evasion and other criminal activities. The cryptocurrency has become increasingly part of the wider financial system, after making its debut on the world’s largest futures exchange in December 2017 when the Chicago Mercantile Exchange (CME) became the second exchange to offer bitcoin derivatives trading.

DISCUSSION AND FINDINGS

Bitcoin is not likely to be a digital currency as Noether et al (2016) pointed out with hidden amounts, origins and destinations of transactions with reasonable efficiency and verifiable, trustless coin generation. As Block-chain Information Exchange (BIX) is slated to support security services for users and transactions (Muftic, 2016). Moreover, weak block verification times approaching the theoretical limits imposed by speed-of-light constraints would become possible with future technology improvements. As sub-chains are built on top of the existing Bitcoin protocol, their implementation does not require any changes to Bitcoin’s consensus rules (Rizun, 2016). As the bitcoin mining game and the block space market offer (Houy, 2016) and the Nxt Forging Algorithm (Popov, 2016) are likely to strengthen secure transactions with the concept of Autonocoin: A Proof-of-Belief Cryptocurrency (Abramowicz, 2016) fully

entrenched. In addition, the Grand Canonical Minority Game (GCMG, a highly simplified financial market model) would have the effect of reducing the overall market volatility (Ortisi, 2016). Moreover, Huntercoin will also be able to scale to very large or even infinite worlds and to enable almost real-time interactions between players (Kraft, 2016). Based on such a convincing argument Zeigler et al (2017) argued using cryptocurrencies as a new funding stream that makes it possible to simply garnering large amounts of capital and create a nonprofit institute for the future of funding scientific research.

Social entrepreneur's betting prospects on the Bitcoin is likely to become a self-fulfilling prophecy as Laukkanen et al (2016) argued of market orientation and brand orientation usually modelled as distinct antecedents of business performance. The market orientation improves the financial performance of a small firm only if it is implemented through brand orientation and eventually translated into brand performance. It remains to be seen that older firms such as Paypal could benefit more than younger firms from investing in branding, while younger firms such as Blockstream benefit from paying attention to the actions of their rivals.

As technological advances further improve Bitcoins accurate evaluations depending upon both entrepreneurs and customers motivation as the process through which relationships between entrepreneurs and investors develop and influence the growth of new Bitcoin ventures. Laura and Knight (2017) theory highlights the multifaceted relationships that entrepreneurs and investors share--comprising both affective and instrumental dimensions--and the bidirectional exchanges of social and financial resources that build these relationships over time.

For crypto-currencies, the spectacular venture capital investments or potential agonizing bankruptcies may affect collective beliefs about the viability of particular markets including Bitcoins. Pontikes and Barnett (2017) show that collective sense-making in the wake of such vital events can result in consensus behavior among entrepreneurs. When spectacular financings result in a collective overstatement of the attractiveness of a market, a consensus emerges that the market is resource-rich, and the path is cleared for many entries, including those that do not have a clear fit such as Bitcoins.

Despite an attractive market conditions, the explosive growth in cryptocurrencies has drawn plenty of skeptics, including central banks, government officials, top bankers and others who think bitcoin is in a bubble that won't end well when it bursts (wsj, 2017). Moreover as Agarwal (2017) indicated, cryptocurrency is impacting the marketing world significantly without fully understanding the risks and benefits involved. Any uses of cryptocurrency in advertising are still a few years away, the use of cryptocurrency might make it more difficult for marketers to collect the kind of data on consumers that often informs advertising strategies to attract leads and predict customer behavior. Cryptocurrency, however, many leads and buyer information will become anonymous, secure and encrypted -- making it difficult for marketers to figure out who bought what, and how customers are responding to marketing tactics. Individuals will be in more control over their personal information, which could make it nearly impossible for marketers to gather it and design marketing strategies accordingly.

Yates (2017) highlighted that as the potential for cryptocurrencies to compete with government-backed money, and the role of central banks is explored by government agencies,

the total value of all cryptocurrency in circulation is over \$100 billion arguably posing a credible threat of supplanting central-bank-issued money. More and more computing power is needed to verify each transaction and create new Bitcoin, which means that the total supply gradually approaches its limit of about 21 million while under 16.5 million Bitcoins are in circulation.

As Rosenberg (2017) indicated whether Bitcoin is a viable alt-trading market or a bubble waiting to burst remains to be seen. Although it is increasingly clear that the general upward momentum of cryptocurrency will continue to be tested by wild swings as the dispersed network of social entrepreneurs, buyers and sellers try to puzzle out investment strategies.

Bitcoin is a purely online virtual currency, unbacked by either physical commodities or sovereign obligation (Sarah et al., 2016); this study argues that if the block-chain technology significantly reduces the costs of processing transactions, it will be adopted on a global scale.

The research conducted since Rosenthal and Jacobson's original study has determined that the Pygmalion effect applies to all kinds of settings, from sports teams to the military to the corporate workplace. This study posits that Bitcoins current spectacular rise is primarily because of the Pygmalion Effect - Great expectations (Paul, 2013) that promote great achievement.

As Zohar (2015) argued that Bitcoin's design fundamentally reshapes and reimagines money with its disruptive nature and promises to change markets, enable new business models, and impact the ability of governments to control money and to regulate businesses. Miners, developers, regulators, and adopters all affect the direction of its growth. With ongoing development, and possible applications beyond the financial domain, Bitcoin, and other protocols that extend it, may yet come to deeply have a Pygmalian Effect on our lives.

RESEARCH IMPLICATIONS

From a customer perspective as Agarwal (2017) argued the one way marketers could navigate the potential lack of consumer data is by paying users directly for their personal information, to be allowed to market to them online, instead of paying the platforms they use. Since the blockchain technology behind cryptocurrency means that no single entity can own or control networks, users will be in control. Cryptocurrency itself further complicates this scenario, as businesses eventually will be unable to differentiate who bought what product or service. Companies may need to pay users directly for their information and for the opportunity to market to them, instead of using platforms such as Facebook or Instagram. Increasing regulations can alter the way companies market their cryptocurrency in the future as Initial Coin Offerings (ICOs) may be subject to the same restrictions as securities.

Key Implications:

1. The Securities and Exchange Commission should warn investors to be careful with bitcoin and other digital currencies.
2. Similar to gas and gold, the Commodities Futures Trading Commission should also formulate some regulation for bitcoin as a commodity.

3. Maintain privacy of users
4. Decentralize mining
5. Make frequent core protocol updates
6. Enhance protocol for rewards and incentives.
7. Treat cryptocurrencies as securities subject to oversight.

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