

Acceptance of Technology in China with a Focus on Digital Currency Usage

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Abstract

New advances in technology happen rapidly and more frequently than ever before. China is no exception. They have adopted new forms of technology at an increasingly swift rate. Theories such as the Technology Acceptance model and the Unified Theory of Acceptance and Use of Technology give a broad explanation as to why people embrace technology. Positive views on technology and having trust in technology are both contributing factors. This study investigates the motive behind technology usage and the use of digital currencies by answering questions of how the Chinese embrace technology and how they embrace digital currencies. I used linear regression to test hypotheses derived from these propositions. The results have important implications for understanding why and how people choose to use digital payment methods or not.

Introduction:

China has always been a contributor to new technologies from ancient times to the present. One such technology is that of digital currencies. Digital currencies are currencies transferred and stored electronically such as online payments and credit cards; no physical forms of money are moved in this process. While technology has allowed the country to modernize greatly (Biswas et Hartley), it is important to continue its forward moving trajectory through modernization in its never-ending cycle of recreation to maintain a level of progression with its technological advancements. To advance, one must understand how the Chinese embrace technology, in this case, digital currencies specifically.

Theory & Hypotheses:

The study of technology usage and its adoption is used as a basis for understanding why and how people embrace digital currencies. Not only is it important to focus on the technological side of things, but it is also important to focus on the human side. If Chinese people find a technology useful and easy to use, they are more also likely to use this type of technology if they have confidence in it. Confidence not only in the mechanics of a device, but they must also trust that their information will not be stolen on the interconnected world wide web. It seems that the Chinese have a great deal of trust in their devices and providers.

Based on this theory, I derived two hypotheses for my research: 1) Those that believe that technology makes a positive impact on life are more likely to use it. 2)

Trust increases the use of technology. People who are more trusting in general implies that they are more likely to trust in technology and therefore use it despite potential negative implications i.e. cybersecurity threats and liars.

Findings:

To test my hypotheses, I used data from the World Values Survey (WVS) from 2010 and ran a linear regression on Stata Software. Table 1 (See appendix A) represents the results of this analysis. Based upon the variables I chose, four were statistically significant. The first statistically significant variable is the belief that technology makes life better which is positively linked to the belief that the world is much better off because of technology. Delving deeper, this clear link also assumes a connection of positive feelings toward the use and acceptance of digital currencies as a type of technology. The second statistically significant variable was the self-identification of being a trusting person. The significance of this variable indicates that being trusting is a strong factor regarding whether one is more likely to accept technology. In addition, a more trusting person will indeed be more trusting of digital technology which concludes that, despite the acts of cyber security and identity theft, they are potentially not at the forefront of a Chinese person's mind and therefore they are not as much of a threat as elsewhere in the world. The third statistically significant variable is the frequency of phone usage. Digital currencies are most easily accessible for use through a mobile device such as a cell phone. The final statistically significant variable has a negative correlation with the independent variable. According to the findings, those that live in the urban part of Zhe Jiang province are actually less likely to believe that technology makes life better which is

surprising as one would think that those who live in a more wealthy and urban area would have more access to technology. These results are significant in understanding how and why the Chinese people embrace technology in general as well as why they embrace digital currencies. The findings in this study indicate that my theory regarding digital currency usage is correlated in a positive way.

Implications:

Although there are a number of domains where this research contributes to the general body of knowledge, I have chosen the two most practical. The first is marketing. This research could help marketers of developing technologies in their efforts to expand their market. 'Painting a picture' of the types of people who do embrace technology and those who do not, would give marketers the information they need to strategize in how to market their 'products' effectively. This 'picture' includes the demographics such as age, gender, social class, economic standing, education, and geographic location which are all useful in deeming what kinds of people use technology, and even potentially what type of technology.

A second domain is that of business. Businesses can also benefit from this research, particularly with regards to the demographics to accommodate the preferences of their customers. This could help businesses determine whether or not they should install digital payment systems and applications within their business based on the types of customers that they cater to. This goes for businesses with China itself but also to tourist locations where Chinese people go to visit.

Moving forward, I hope to see research encompass more data. This would significantly develop the greater

understanding of technology acceptance in China and around the world.

	(0.003)
Employed	-0.103 (0.074)
Beijing	-0.05 (0.257)
Urban Guangdong	-0.047 (0.031)
Urban Zhe Jiang	-0.046* (0.025)
Urban Jiang Su	0.425*** (0.019)

Appendix A

Table 1. Linear regression results of technology acceptance in China

Regressor	Coefficient (Standard Error)
Belief That Technology Makes Life Better	0.425*** (0.019)
Trust	0.21*** (0.04)
Male	0.004 (0.064)
Income	0.017 (0.018)
Education	-0.011 (0.017)
Phone Use	0.161* (0.086)
Email Use	0.023 (0.135)
Internet Use	-0.149 (0.103)
Age	-0.001

Statistically *90% = .10
Significant if *95% = .05
*99% = .07

(Please note that this article has been modified from its original research paper to summarize the findings. For a more complete analysis of the results and the research process, please contact the author.)

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Recommended Citation

Bechtel, J. (2019). Acceptance of Technology in China with a Focus on Digital Currency Usage. *Made in Millersville Journal*, 2019. Retrieved from <https://www.mimjournal.com>