

THAI RETAIL BANKING IN TIMES OF STABLECOINS AND OTHER CRYPTOCURRENCIES

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Abstract- Stablecoins are one kind of cryptocurrency. Unlike a fiat currency it is not backed by any monetary authority such as a Central Bank. The idea is to enjoy a fixed exchange rate between a cryptocurrency and a convertible fiat currency such as the US Dollar i.e. the low costs, high security and global availability features of a cryptocurrency combined with the broad acceptance of a fiat currency. Dollar-pegged stablecoins are already available to everyone. Tether (USDT) enjoys a 97% market share and is traded on more than 400 exchanges. In contrast, retail banking is still a face-to-face engagement based on the exchange of fiat currencies. This paper fills a research gap by analysing the potential impact of stablecoins on the retail banking landscape. Research object were the branches of a major Thai bank. Preliminary findings suggest that customers are more advanced than the banks who regard cryptocurrencies as a threat and not as a gift. Banking retail strategies must adapt to such new blockchain-based landscapes. If banks do not actively push these new services then the clients will pull them. Losers will be the lagging banks because the lines between crypto and traditional finance are rapidly blurring.
Keywords – Stablecoins, Tether, blockchain, Ethereum, cryptocurrency, retail banking, Thailand.

1. INTRODUCTION

Bank customers still use local branches and these branches continue to be an important source of competitive advantage for many financial service providers. Yet, the role of bank branches has shifted towards a sales-oriented focus from a predominantly transaction-based focus. Bank branches act as the front-line and now branch networks perform more functions. Typically, bank branches act as a front-line service to customers by cross-selling a range of related products. More generally, branch networks perform various functions to support the bank's strategies. However, examining branch network performance is complicated, due to different financial environments, different levels of development, etc. As bank branches take on a more important role, more scholars are examining branch network strategies. Bank management strategies should pursue increased market share by mainly acting as sales forces rather than service centers. Globalization, deregulation (or regulatory innovations), and advances in technology such as blockchains are vital components of market dynamics that have been shaping the banking and insurance industries in modern financial markets over the past decade.

Customer satisfaction and customer service quality (which are often used interchangeably in studies in the retail banking context) have been recognized as key strategic issues for organizations operating in the service sector, including retail banking [1]. Strong linkages are found between service quality dimensions (e.g. courteous service providers) and overall customer satisfaction [2]. The key service quality determinants for specific retail banking products will vary significantly according to the specific needs of different customers, and will also be influenced by different segment characteristics. By focusing on the relationships among customer satisfaction, customer retention, and profitability in the retail banking industry, various researchers have found that increasing overall customer satisfaction leads to greater repurchase intention, as well as actual repurchase behavior, which could then lead to profitability.

Regarding the effect of customer loyalty on revenue in the retail banking industry, Levesque and McDougall [3] confirmed that greater loyalty lowered servicing costs, reduced marketing expenses, and boosted business from existing customers. There are three main kinds of service quality measurement models: the early Scandinavian models [4]; the SERVQUAL model of Parasuraman et al. [5-8]; and finally, the SERVPERF model [9] by Cronin and Taylor. All models use different dimensions to measure service quality, and these dimensions are comprised of different elements and levels of survey measures (i.e. the actual level of service received; the discrepancy between perceived service and the minimum level of service that customers are willing to accept; and the level of service that customers believed "could be" and "should be" provided, compared to what is provided). However, different service quality constructs and dimensions vary greatly depending on the empirical context such as:

- Product/Service
- Quality Attributes
- Customer
- Satisfaction
- Customer
- Loyalty

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- Customer Retention
- Profit

Service quality should mirror the particular service setting under investigation. For instance, three dimensions for service quality (interactive quality; physical quality; and corporate quality) were developed by Lehtinen and Lehtinen [4]. Another set of three dimensions (technical, functional, and reputational) was proposed by Gronroos [10,11]. Later, five dimensions (corporate image, internal organization, physical support of the service producing system, staff – customer interaction, and the level of customer satisfaction) were added. Subject to psychometric examination, five dimensions of SERVQUAL [5-8] became the most widely used measure of service quality within service industries:

- (1) tangibles – physical facilities, equipment and appearance of personnel;
- (2) reliability – ability to perform the promised service dependably and accurately;
- (3) responsiveness – willingness to help customers and provide prompt service;
- (4) assurance – knowledge and courtesy of employees and their ability to inspire trust and confidence; and
- (5) empathy – caring, the individualized attention the firm provides its customers.

The SERVQUAL instrument consists of 22 pairs; of these, 22 items assess customers' expectations of service. The other 22 matching items measure customers' perceptions of the service they actually received from a particular organization. Parasuraman et al. [5-8] proposed a service quality model based on gap analysis. They defined service quality as the degree and direction of discrepancy between customer perceptions of service and expectations. When expected service exceeds perceived service, quality is less than satisfactory. When expected service equals perceived service, perceived quality is satisfactory and when expected service exceeds perceived service then service levels are more than satisfactory, possibly even tending towards customer delight.

Subsequently, both the relevance and practicality of measuring service quality using the perceptions/expectations gap concept became a matter for debate, especially regarding the validity of the gap theory, which suggests that the difference between consumers' expectations about the performance of service providers and their assessment of the actual performance is what drives their perception of service quality. This debate led to the development of the SERVPERF dimensions, which were evaluated according to perceptions only, (without weighting expectations).

The arguments in Heskett et al. [12,13] are:

- (i) profit and growth are stimulated primarily by customer loyalty;
- (ii) loyalty is a direct result of customer satisfaction;
- (iii) satisfaction is largely influenced by the value of services provided to customers;
- (iv) value is created by satisfied, loyal and productive employees;
- (v) employee satisfaction results primarily from high-quality support services and policies that enable employees to deliver results to customers.

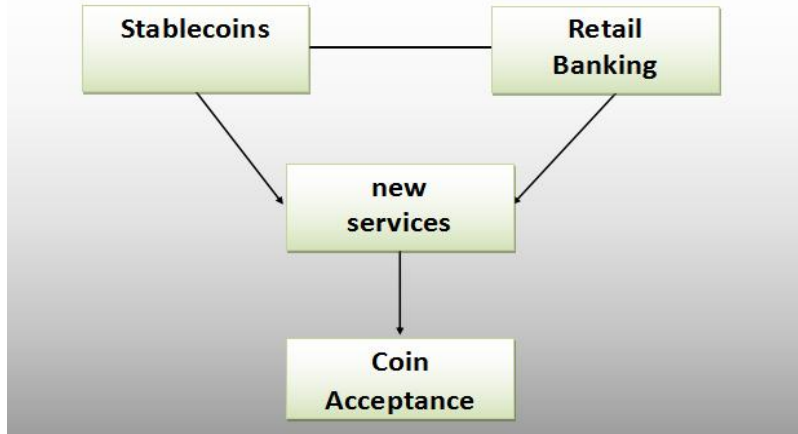
Based on case studies and the empirical study of successful organizations, several researchers have proposed plausible links for the service-profit chain by aiming to develop a complete and accurate view of the links between the services provided by an organization and its bottom line (e.g. profits). For instance, these three models are widely used in substantial research efforts to identify the drivers of performance, as well as in benchmarking the efficiency of commercial banks, in the analysis of successful service organizations.

Deregulation in the banking industry has granted more choice to consumers, and since there is now little differentiation among banking products, many retail banks are now gearing their competitive strategies towards optimal customer satisfaction and loyalty, by improving service quality standards. By enhancing loyalty, a retail bank can lower its servicing costs and increase sales opportunities for cross-selling products and services to their customers. Customer satisfaction is most likely to increase when the quality of service improves, when more service features are added and made more efficient, and when customer complaints are handled better.

Fewer entry-level barriers, increased deregulation and the rapid growth of information technology (IT) have all had an impact on the increasingly fierce competition within the retail banking industry. Banks must increase their non-interest income, which has traditionally been their main source of revenue, because their interest income has fallen so dramatically. Therefore, they must change their focus from being an order-taker to an account-winner. Banks are aware of the importance of IT, and apply it to formulate policies and investment strategies in marketing, customer information management and operational efficiency. They can improve business by offering customers a wider range of services through electronic channels, since this allows them to respond more efficiently to customer needs.

An extended retail delivery facility tends to allow better customer contact opportunities when customers are offered a convenient location. This enables the bank to cross-sell different banking products to customers at one place. In general, there are two main uses of IT in the retail banking business - one, to fulfill the customer's need for information relating to his or her account, and two, to fulfill the customer's need for access to payment facilities. The two categories of applications of IT in the financial business are Electronic Payment Systems, and Internal Systems. Electronic Payment Systems include ATMs, Electronic Funds Transfer at Point of Sale (EFTPOS), and Telephone/ Home/ Internet Banking. Internal Systems include

Counseling and Sales Systems, and Countertop Teller Systems that help the staff to deal with customers, and these are used for purely administrative purposes.

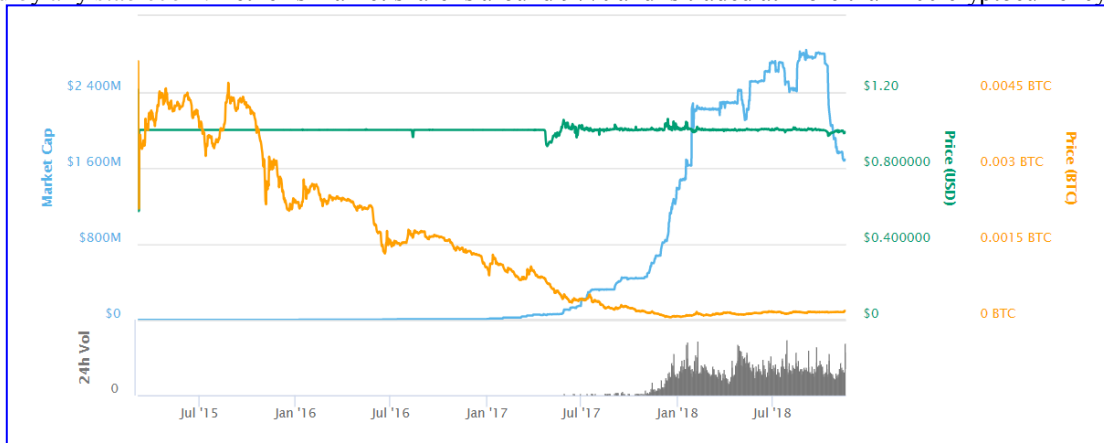


1.1 Research Framework

Figure 1 shows the research framework. The acceptance of Stablecoins will depend on the retail customers. To arrive at such acceptance the banking sector will have to come up with new services for example using Stablecoins in supply chain transactions when a payment is triggered automatically as soon as the smart contract conditions have been met.

2. STABLECOINS

Stablecoins are not a new idea; one of the original and most utilized US\$ pegged crypto assets, Tether (USDT), has been circulating since 2015 but its lack of a public audit or regulatory compliance has raised concerns. As a result, Tether is facing enormous pressure from the market and its price has now traded below US\$ 1 for the past month – the longest departure from a peg faced by any stablecoin. Tether’s market share is around 97% and is traded at more than 400 cryptocurrency markets



2.1 Stablecoin Tether (USDT) prices

Blue indicates the market capitalisation which goes against the yellow Bitcoin price and the green dollar peg, see Figure 2. The charts shows that the trading volume increased starting from the beginning of 2018. Despite the fact Tether lost value against Bitcoin its market capitalisation increased.

Tether’s inability to remain stable is caused by its inability to work with smart contracts, and the same applies to nearly all other stablecoins. It will need a stable smart contract compatible currency. It is likely that an Ethereum-based stablecoins like the USDC will become the currency of choice for banking clients. USDC is based on ERC-20 token on the Ethereum network. It was launched by the cryptocurrency exchange Coinbase and Goldman Sachs backed crypto firm Circle in October 2018. USDC’s market share is less than 1% however.

A commercial bank is operating under the traditional reserve banking model and the funds are lent out to borrowers. By contrast, Tether Ltd., as with other stablecoin issuers, asserts that it maintains a full reserve for the issued tokens i.e. promises to always redeem tokens at a fixed exchange rate – in this case, one-to-one to the US\$.

To be successful it will need to convince the community of token holders of its solvency. And such degree of trust can be hard to get. It involves the psychology of the market, which can shift any time as past financial crises have shown.

3. RESEARCH FINDINGS

The bank in this study classifies branches according to distinct characteristics, based on the branch location and size, specific business purposes, as well as according to the hierarchy of each branch's management structure. This segmentation is a convenient way for top management to compare the efficiency scores for different branches.

The relationship between customer service and financial performance is clearly a critical success factor for service providers like bank branches. A key to the link between customer service and profitability is that of "loyalty" and the widely discussed "loyalty ladder" which reflects how customer loyalty deepens over time. Several studies have demonstrated the link between loyalty (or customer retention) and financial performance [12,13]. The most influential contribution in this area is the widely-known "service-profit chain" of Heskett et al. [12,13], which draws together previous empirical studies and proposes a more comprehensive model that links internal service quality with the following: employee satisfaction; productivity and retention; external service quality; customer satisfaction; customer loyalty; revenue growth; and profitability. This model is relevant to the present study in that the "service-profit chain" includes the three components of service quality, profitability and efficiency. The "service-profit chain" also provides a strong conceptual foundation for this empirical study. The findings support the service profit chain concept of Heskett et al. [12,13], which stipulates that a series of causal relationships between employee satisfaction and customer satisfaction result in profit performance and growth.

Results of this study are comparable to those of Hirtle and Stiroh's study [14], which also found that alternative IT distribution channels such as electronic banking provided a profitable shift in retail banking. Electronic banking was a low-cost alternative to high-cost branches. Banks increase fees for personal services to facilitate the substitution of electronic channels. Similar results were found in a study on the strategic impact of IT in the retail financial service industry. Retail banks have often pioneered the development of technology to provide traditional services that lower costs and yet are also of superior quality. These findings support the suggestion that banks could improve efficiency by increasing IT use. Other branch efficiency studies on IT in bank branches indicate that to maximize net income, particularly the non-interest income of the branch, transactions should focus more on alternative channels such as telephone banking, internet banking and automated banking.

4. CONCLUSION

The findings show how the branch employee's perception of service impacted on the customer service quality, and how the bank could improve profitability by focusing on improvements in customer service quality and introducing new products. IT-based transactions at the branch and profit efficiency correlated significantly, as did current accounts, savings accounts, time deposits accounts, loans, insurance premiums, and commissions. More importantly, the results from internal and external customer-service-quality surveys indicated that both internal and external customers viewed IT as a key contributing factor to branch service quality. Important attributes, such as user-friendly technology, were important criteria in service choice for internal and external customers. This implies that the implementation of IT-based services would improve branch profit efficiency, and increase both internal customer-service quality and external customer-service quality. The study suggests, therefore, that perceptions of internal customer service quality do matter, and that the bank should focus on taking care of its staff, or internal customers, in order to satisfy the external customers. And this also means that if the bank wants to increase product sales, it needs to motivate front-line staff to become customer-oriented and service-oriented. For example, staff could take a more disciplined look at what customers do and structure calling programs, sales interactions and other key processes to ensure consistent, desirable behaviors which could then lead to increased profit.

Many barriers to competition in the global banking and insurance industries have been removed because of deregulatory legislation which subsequently led to intense competition in this service sector. The increasing competitive climate prompted banks to adopt a market-oriented approach to business, and success now depends on the ability to stand out in the crowded market. This study suggests that the way to achieve that goal is to develop a dual high-touch and high-tech policy approach. High-touch policies would focus on keeping customers satisfied, but this refers not only to the relationships between staff and their external customers, but also to the way staff relate to each other, as internal customers. Happy staff are motivated to attract loyal customers, but providing excellent service without also offering excellent products is only half of the equation. The bank must also keep up with the latest advances in technology, since without the right tools for new products, staff cannot achieve the high cross-selling ratios that are now required of them.

The banking industry operates in such a competitive market that product differentiation is impossible; every bank is delivering the same product. Customers would probably consider the range of products offered by the bank in the study as being no different from that of other banks. There will not be much variation in the interest rates or the products on offer. Pricing is very much fixed now and driven by the market place. Cross-selling has emerged as a new income generator for banks, particularly by selling insurance policies. Continual advances in technology also mean that banks must keep pace to make sure staff can be as efficient as possible, which in turn, leads to optimal profit efficiency. One way for a bank to stand out in the crowded market therefore, is to offer customers better service than the competing banks, by providing staff with better products and the appropriate technology to deliver them. As this study shows, the key to offering optimal service is to keep staff customer-focused and service oriented, and this can be achieved when staff communicate with each other as well as they communicate with their customers. For the past 60 years, relationship marketing and a high-touch approach have long been employed to maintain a competitive advantage, and, consequently, this approach was mirrored in the positioning

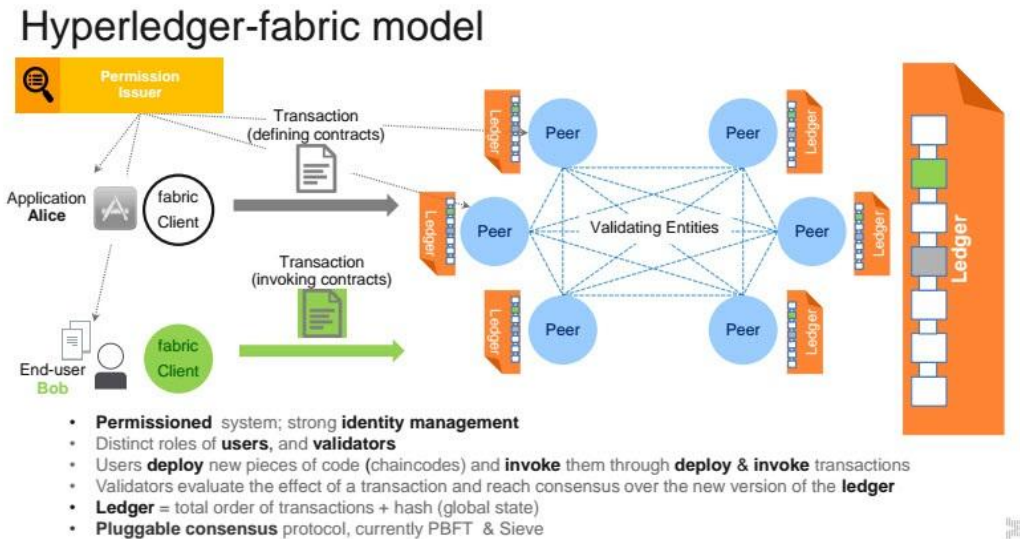
strategy. However, this has become an old-fashioned image of the “traditional and conservative bank”, which can now be detrimental to future success.

A bank may encourage the use of technology interface services that might then lead to reduced overhead costs and increased cross-selling opportunities with value-added products. More importantly, market segmentation and careful strategic marketing should be done in order to offer specific products for distinct groups of customers. In high contact service industries, such as the banking industry, internal customer service quality efficiency is often related to cost efficiency (cost savings can be achieved by improving internal customer service quality) but external customer service quality efficiency is related to revenue efficiency (low external customer service quality may result in a loss of customers and revenues). The bank’s top management required branches to take action by offering improved customer value, to better meet customer needs in a specific niche market. Management should recognize that operating and profit inefficiency are important problems for the bank as a whole, as opposed to only at the branch level. These problems resulted from the following: centralized decision making; ignorance of customer demographics in branch segmentation; a lack of IT capabilities; restricted IT knowledge and IT infrastructure; poor criteria in selecting branch managers; and poor resource allocation from the bank’s headquarters. The lack of professional experience among branch managers was only one influence.

As the market evolves, new banking services will continue to emerge – fiat-backed tokens may be used frequently and sophisticated insurance options should be offered to protect token holders. Besides a fiat currency backing it could come in form of a gold bullion backing. A successful stablecoin could facilitate automated (smart contracts) real-time digital payments with fiat-backed tokens and being part of other blockchains such as supply chain management and cross-border remittances.

Looking beyond retail banking, what could be a future option is an Ethereum-based stablecoin called ASEANcoin, based on ERC-20. ASEANcoin could be backed by a currency basket very much like the ECU in Europe before the Euro was introduced. In the basket would be a fixed percentage of ASEAN currencies such as the Indonesian Rupiah, Thai Baht, Vietnamese Dong etc. The advantage will be that, for example, a Thai importer can pay in ASEANcoins and receive coins when exporting. No expensive foreign exchange fees or conversion margins. Payment would automatically take place when contract conditions are met which is the characteristic of smart contracts.

Such coins need not to be issued by banks. The United Nations could introduce a stablecoin called UNcoin which could be given to refugees. They in turn could buy food with it. Retailers will accept the coin because they can be sure that they can convert it at any time into a fiat currency. Even developed countries may want to look at the possibility of issuing cryptocurrencies [15]. This way one can combine the advantages of blockchains with the trust in money that is legal tender. This may come in form of public blockchains but can also come in form of private blockchains based on Hyperledger.



4.1 Hyperledger architecture (source: IBM)

Figure 3 shows the basic set-up of a private Hyperledger blockchain. In contrast to a public blockchain a private one is restricted i.e. one needs permission to participate. The ‘recruitment’ of new participants can be decentralised (a user can recruit another user) or centralised (an organisation must invite). Stablecoins lend themselves to be on public blockchains (Ethereum) but could also be private. For example, a country wants to restrict the use to domestic citizens.

While the society may be divided into two over this particular development, one thing is for sure, the lines between crypto and traditional finance are rapidly blurring. It remains to be seen if the two frameworks operate in a parallel, or one supersedes the other in coming years.

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