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Unravelling the puzzle of consumer behavior: the path to future success in designing financial services

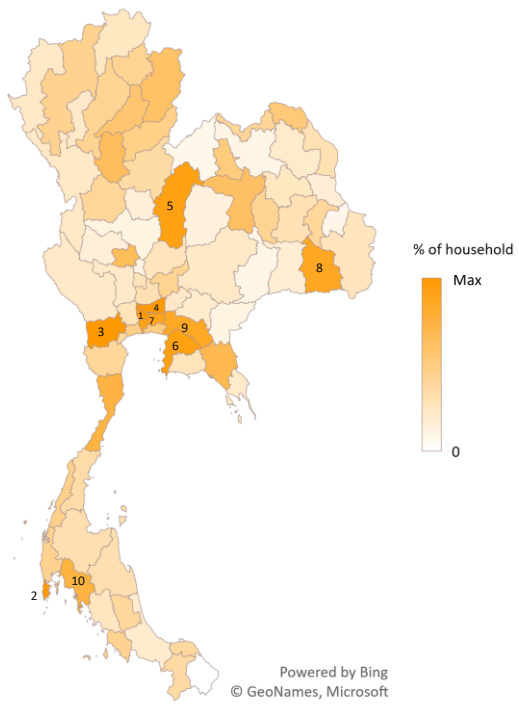
The unfolding revolution in financial technology (or FinTech) has its roots in recent rapid technological development, the ubiquity of the internet and changes in consumer demand, and because of the way that these factors have combined, the FinTech revolution is now being carried out not just by traditional banking and financial institutions but also by non-bank players. The immediate effects of this are to open up financial services to a greater number of consumers, to allow players to respond to a wider range of consumer needs, and then to reduce the costs to customers of accessing these. An investigation carried out by Krungsri Research into the uptake of FinTech services shows that traditional banking remains consumers' preferred way of accessing financial services but interest in FinTech is building and consumers are increasingly meeting their needs for financial services by combining offerings distributed through a number of different channels. **Given these developments, future financial products and services will need to be designed so that they are easy and quick to use, and incur only low costs, which may be achieved by integrating them with other internet services that consumers use as part of their day-to-day life, such as online shopping and messaging services.**

For several years now, the FinTech sector, and in particular the cuts in unit costs that it has made possible, has played an important role in many parts of the world in increasing the proportion of the population that is able to access financial services (the rate of 'financial inclusion'), though this has been most marked among the unbanked and underbanked segments of the market. Thus, research by the World Bank shows that between 2014 and 2017, consumers in developing countries gained increasing access to financial services offered by the banking sector; over these years the proportion of the population that held an account at a financial institution increased from 62% to 69%[1/]. Especially important in driving this growth has been cooperation between banks and non-banking operations, the majority of which are mobile money providers.

FinTech is able to increase the coverage of financial services by filling in the gaps in service provision that traditional banking tends to leave open. The existence of the latter is demonstrated in work by Krungsri Research carried out in 2016, which revealed that there is a 53% chance of consumers not having access to financial services if they are low-income earners, are insufficiently well informed, or if they live in remote areas[2/], while the costs of banking are proportionately higher for low-income earners than they are for those on a high-income[3/].

A survey carried out in 2018 by the National Statistical Office on access to financial services in Thailand showed that at that time, only 10% of the population were using FinTech services (considering only the use of QR payments, PromptPay and mobile banking). The majority of this was accounted for by making payments and transfers (an average of 7% and 6% of the population of each province, respectively), while uptake of other services was very low; only 2% of respondents used FinTech for managing their savings and a mere 1% used it for arranging loans, thus making mobile banking and PromptPay the most popular applications. By area, use of FinTech services was strongest in the central and eastern parts of the country, and uptake was especially strong around Bangkok, in areas such as Nonthaburi, Pathum Thani, Samut Sakhon, Samut Songkhram, Ratchaburi, Chachoengsao, Chonburi and Chantaburi (Figures 1 and 2).

Figure 1: The Ratio of Household Using Fintech in Each Province in Thailand



Rank	Province	Ratio	Rank	Province	Ratio
1	Nonthaburi	31	6	Chonburi	18
2	Phuket	26	7	Bangkok	18
3	Ratchaburi	23	8	Sisaket	17
4	Pathum Thani	23	9	Chachoengsao	17
5	Phetchabun	18	10	Krabi	15

Source: NSO's SES, Krungsri Research

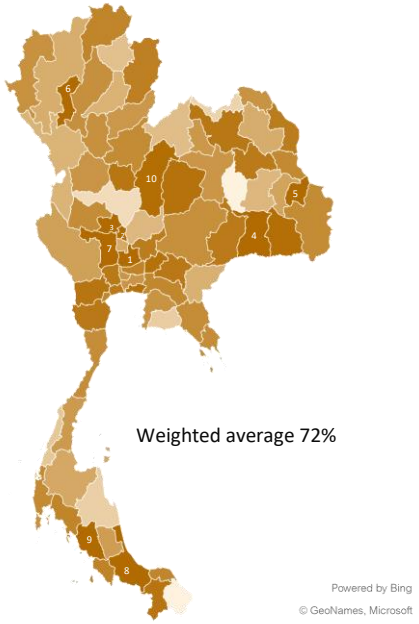
1/ Data from The Global Findex Database 2017, the World Bank.

2/ From a logistic model based on the 4 primary banking services of transfers, payments, deposits and loans. The model uses data drawn from the National Statistical Office's 2016 Household Socio-economic Survey.

3/ The net price of financial services, calculated from the difference between income and expenses connected to the cost of financial services. The data are drawn from the National Statistical Office's 2016 Household Socio-economic Survey.

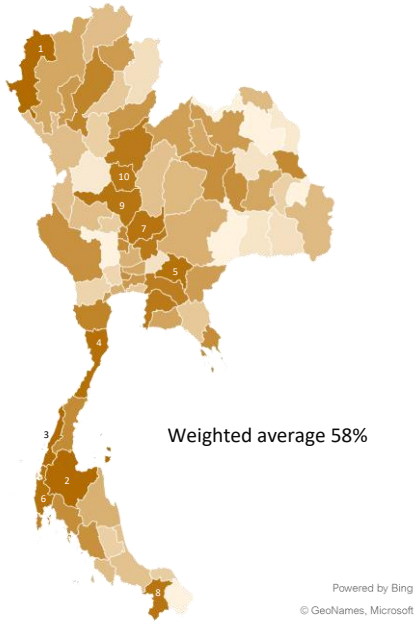
Figure 2: Percentage of Households Using FinTech Services, by Province

Payments



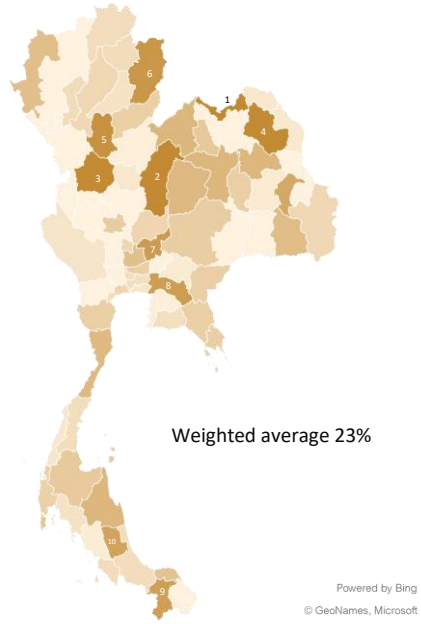
Rank	Province	%
1	Phra Nakhon Si Ayutthaya	100
2	Sing Buri	100
3	Chai Nat	100
4	Surin	100
5	Amnat Charoen	100
6	Lamphun	100
7	Suphan Buri	100
8	Songkhla	100
9	Trang	100
10	Phetchabun	98

Transfers



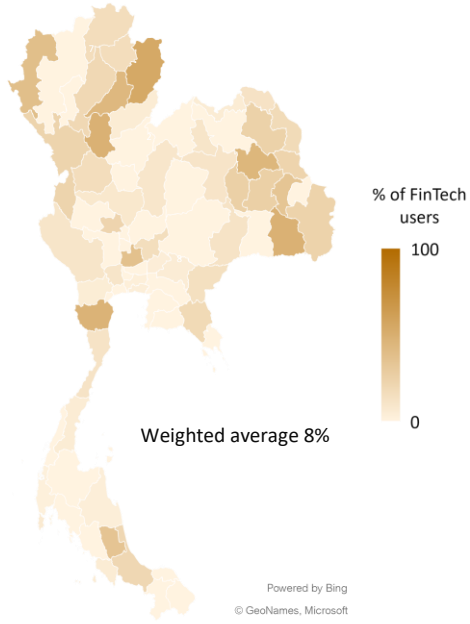
Rank	Province	%
1	Mae Hong Son	100
2	Surat Thani	100
3	Ranong	100
4	Prachuap Khiri Khan	97
5	Prachinburi	95
6	Phang Nga	95
7	Lopburi	93
8	Yala	92
9	Nakhon Sawan	92
10	Phichit	91

Deposits/Saving



Rank	Province	%
1	Nong Khai	78
2	Phetchabun	77
3	Kamphaeng Phet	77
4	Sakon Nakhon	76
5	Sukhothai	72
6	Nan	67
7	Saraburi	64
8	Chachoengsao	63
9	Yala	61
10	Phatthalung	58

Loans (excl. credit cards)



Rank	Province	%
1	Nan	54
2	Sukhothai	48
3	Sisaket	48
4	Phetchaburi	47
5	Kalasin	44
6	Phrae	43
7	Mae Hong Son	38
8	Phra Nakhon Si Ayutthaya	37
9	Phatthalung	34
10	Yasothorn	34

Note: Weighted average is weighted according to the number of households in each province.
Source: NSO's SES, Krungsri Research

An in-depth look at consumer use of financial services

To increase our understanding of the issues around the uptake of FinTech and the influence on this of factors such as individual use of technology, attitudes towards FinTech and financial literacy, Krungsri Research undertook its FinTech adoption survey. The survey ran between July 2018 and February 2019, involved a sample group of 583 respondents, and was conducted in the 6 provinces of Nonthaburi, Samut Sakhon, Ratchaburi, Lopburi, Chonburi and Chachoengsao (the research area was selected with the assistance of the National Statistical Office). The research covered financial services provided by both bank and non-bank operators, and included (i) commercial banking services, (ii) services from other financial institutions, (iii) online/mobile banking, (iv) services provided by companies in the tech sector, including technology companies, telcos, and e-commerce companies that provide payment services, (v) services from FinTech startups, such as AirPay and Boonterm, and (vi) informal providers of financial services.

- **Visiting a bricks-and-mortar bank branch remains consumers' preferred means of accessing banking services** and 85% of survey respondents reported that they still visited a bank. As providers of financial services, banks were followed in importance by other financial institutions, including pawnbrokers, savings cooperatives, brokers, hire-purchase operations and providers of personal loans, and 41% of respondents had used one of these (Figure 3). Survey respondents were nevertheless interested in FinTech and 54% had used a service provided by a FinTech company in the previous 12 months (Figure 4).
- **Consumers are beginning to experiment with the use of FinTech services that are provided by players that they trust or that they access through distribution or marketing channels which they otherwise use in normal daily life,** but consumers are also showing a tendency to use a number of different services at the same time. In terms of the providers that respondents preferred to use, FinTech services were mostly consumed in the form of online or mobile banking services provided by financial institutions (65% of respondents who used Fintech services used these) because users already had a connection to these through their traditional service offerings. Online/mobile banking is therefore an additional way of providing consumers with access to financial services that is also quicker, cheaper and more convenient than existing routes. However, respondents reported some usage of FinTech services provided by tech and telecoms companies, such as True money, or of e-wallet payment services from 7-11. At the same time, consumers are also beginning to use the services of FinTech startups such as AirPay and BluePay.

Figure 3: The Ratio of Using Financial Services Channels

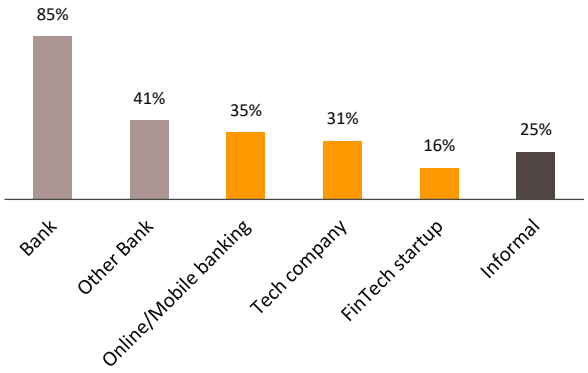
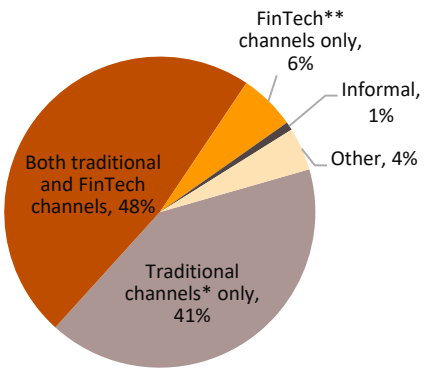


Figure 4: The Ratio of Household Using Traditional and FinTech Channels



* Traditional channels include banks and other financial institutions.
** FinTech channels include online/mobile banking and other financial technology services provided by Tech companies or FinTech startups.

Figure 5: Number of Financial Channels that Respondents Used Divided by Service Providers

		Service providers					
		Bank	Other bank	Online/ Mobile banking	Tech company	FinTech startup	Informal
Number of channels	1						
	2						
	3						
	4						
	5						
	6						
Number of respondents		495	240	204	178	95	145

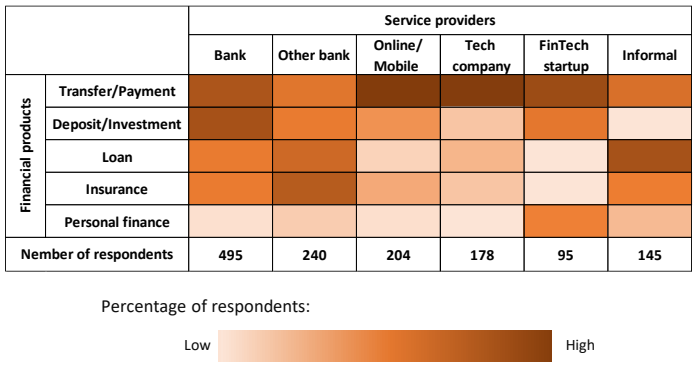
Percentage of respondents:

Low — High

Consumers who use FinTech services tend to use those of a wide range of providers in addition to those supplied by traditional players in financial services, and the survey reveals that respondents who accessed FinTech services tended to use 3-4 different financial services simultaneously, including those of commercial banks, other financial institutions, telecoms service providers, retailers, and specialist FinTech companies. In contrast to this, the majority of consumers who did not use FinTech services relied instead on just a single provider of financial services, which might be a bank, another financial institution or an unlicensed lender (Figure 5). It is clear that providing financial services through FinTech-type channels will help many financial institutions reduce their costs and because of this, the emergence of the FinTech industry is helping to change consumer norms, and whereas in the past, they would typically expect to deal with only a single main provider of financial services, consumers are increasingly surveying the market and comparing the choices available before making any kind of purchasing decision.

- **At present, the use of FinTech services is largely restricted to making payments and money transfers, and so while more complicated financial transactions tend to be carried out at a bank branch or in person with a representative,** the market for simple and straightforward financial services (i.e. payments and transfers) is proving to be more open to FinTech operators (Figure 6). In addition, it was found that those who made use of online money transfer services tended to transfer money more frequently per day or per week than those who did not.

Figure 6: Percentage of Respondents Using Financial Products Divided by Service Providers



A multitude of reasons for using financial services

To better understand consumer needs and motivations and then to be able to use this knowledge to design better and more attractive FinTech services, Krungsri Research also investigated consumers' reasons for using different types of financial services, the problems that they encounter in using these, and their reasons for not using FinTech service providers. We therefore offer a discussion of some of the more interesting findings below (Figure 7).

- **Convenience, familiarity and confidence in their safety are the main reasons that were given for accessing financial services in a bank branch or via an ATM.** 66% of respondents to the survey gave speed and convenience as their main reason for using a traditional bank or ATM, although this response may be somewhat biased because the majority of respondents live in urban areas and thus have easier access to these facilities than do people in more remote areas. In addition, 56% of respondents cited familiarity and 36% gave safety as important factors motivating their use of banks and ATMs. However, the majority of respondents also pointed out that using banks and ATMs had disadvantages in that these may be crowded and so accessing services may be slow, it may not be convenient to travel to a bank or an ATM, and their use may incur a high cost.

- **Easier access to loans, more straightforward conditions, and the existence of promotions and incentives are important factors motivating consumers to decide to use the services offered by other types of financial institutions and by unlicensed lenders.** In addition to the convenience of accessing these financial services, which was a basic need of the respondents, incentives that also motivate consumers include low interest rates or access to government financial support, and these are major reasons given for using the services offered by non-bank financial institutions. Respondents who borrowed from unlicensed lenders also decided to use these services because they had to borrow money and using lenders outside the formal system meant that they could do so with relative ease, even though this then exposed the borrower to greater costs and a higher level of risk.

- **Significant factors in motivating the use of FinTech services include convenience, speed, low costs and incentives.** Of those, convenience and speed were the most important factors in encouraging consumers to take up offerings from FinTech players, especially with regard to users of online and mobile banking, who identified these services as being both easy to use and quick to access, as well as being safe (because they are operated by traditional banks) and cheaper than the alternatives. Users of FinTech services provided by non-banks offered opinions that were in line with these, that is that their reasons for using FinTech services were their convenience and speed, although they were also attracted by the low costs of use and the incentives on offer from the service providers.

- **A lack of need, a lack of understanding and a lack of faith in their security were the main factors given by respondents who did not use FinTech services.** Of those who had not yet used any FinTech offerings, 58% said that this was because they had no need for them, 30% said that they did not understand the services, 19% said that the services were too complicated and difficult, and a further 19% were worried about safety, security breaches and the possible release of personal information. The survey thus reveals that attitudes, and fear and worries over the use of FinTech are the principal factors that service providers need to attend to when developing new services and products.

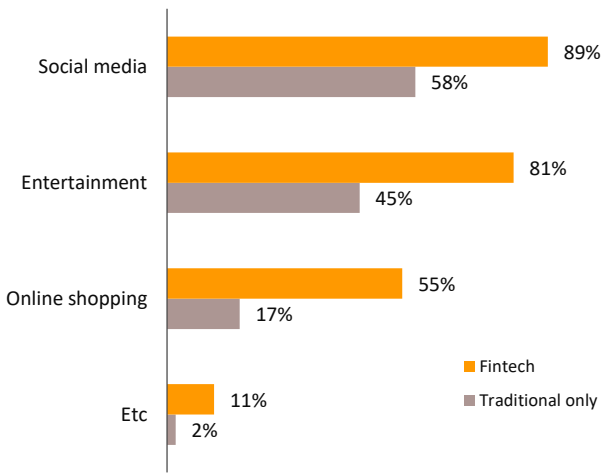
Figure 7: Cause of Using Financial Services in Each Channels

	Bank	Other financial institution	Informal	Fintech
Convenience and fast	66%	34%	68%	86%
Get used to	56%	5%	16%	10%
Trust in security	36%	8%	11%	16%
Low service fees	9%	11%	8%	22%
Simple terms and conditions of services	6%	10%	18%	9%
Access to loan	6%	28%	29%	1%
Promotion and privilages	5%	15%	0%	10%
roduct and service are better served and easy to use	4%	11%	8%	4%
High switching cost to other channels	2%	5%	13%	1%
Was not aware it exists	2%	0%	5%	0%
Have no knowledge of other channels	0%	0%	3%	2%
Afraid of rejection from other providers	0%	0%	8%	1%

Other factors affecting consumer attitudes towards FinTech

In addition to investigating respondents' reasons for accessing financial services through different channels and the problems that arose from this, the survey also looked at other factors that might have an impact on the consumption of FinTech services, such as respondents' use of digital technology in their daily lives. Four major traits were thought to potentially have an effect on the use of FinTech, these being (i) extent of risk aversion, (ii) openness to novelty, (iii) trust and (iv) patience, though in addition, the survey also investigated respondents' financial literacy. The results show that FinTech users tend to engage in at least 2 or 3 different forms of online activity in their daily lives, including for example social media, online shopping or online entertainment services, and their usage rates are substantially higher than those of consumers who use offline financial services from financial institutions (Figure 8). However, it was also found that there was no significant difference between users and non-users of FinTech services with regard to their opinions or their financial literacy.

Figure 8: Percentages of Respondents Using Digital Channels



Developing financial services to meet consumer needs

Krungsri Research's analysis shows that FinTech will help to increase the ability of financial services to respond to consumer needs, though FinTech offerings will need to have the following characteristics.

- **FinTech use needs to be simple, straightforward and quick, and to impose only low costs on the user, relative to the alternatives.** As described above, traditional distribution channels for financial services were viewed by respondents as being potentially inconvenient to get to, slow in providing services and expensive to access, and so in response to these criticisms, services designed by FinTech operators should aim to be convenient, rapid and cheap.

- **Financial services that are made available through FinTech channels will need to be developed in terms of both their breadth and their depth and to be offered by a variety of different providers.** Developing FinTech products will help consumers cut the costs of accessing or switching between providers of financial services, as well as allowing providers to offer a wider but more suitable range of products to individual consumers, and this will thus present a major opportunity to expand the reach of the financial services industry, especially with regard to unbanked or underbanked groups.

  Financial institutions will be one of the key players in offering or developing FinTech services since doing so will allow them to offer services to existing customers that are more efficient and that will build greater consumer satisfaction. This will be because these have lower per-unit costs over the long term and it will be possible to access these services at any time and in any location, but beyond this, financial institutions will also be able to expand their services to include consumers that are at present outside their reach or to offer their customers original, new products. New offerings may be made either under a bank's own brand or not, since it is possible to package FinTech services either as financial products or as background services that operate to support another activity.

  At the same time, non-banking operations will be able to offer an increasingly varied range of FinTech services because they can more easily expand their service offerings by exploiting the particular strengths that each has with regard to the distribution channel that it controls, whether that be achieved through apps, or a presence in convenience stores, customer service centers, etc. New entrants to the market will therefore tend to focus their efforts on particular consumer groups by building financial services that meet the needs of tightly defined groups.

- **FinTech services should be integrated with the provision of other services that consumers are already using,** because as seen above, a lack of familiarity with and understanding of FinTech products, together with fears over their use, are major obstacles that are encouraging consumers to stick with traditional service channels and so are preventing the wider uptake of FinTech services. If, on the other hand, FinTech products are bundled with products or activities that consumers are already routinely encountering in their day-to-day life (e.g. engaging in online shopping or using messaging apps), this will build familiarity and confidence. This bundling of services could be done in such a way that the use of the FinTech product is optional to the consumer, though they might be offered an incentive of some kind to do so.

- **FinTech providers will also need to be ready to offer solutions to the problems which consumers may encounter when using their products.** Because the existence of some new financial services will not be immediately clear to many consumers, building links between service providers and consumers will be an important factor in developing customer trust and satisfaction. Given this, establishing a point of connection between the two parties when the customer has questions or a problem that needs to be resolved will be a trigger point in building a satisfactory long-term relationship. This connection might be made in a traditional branch outlet, in person with a representative, or by contacting a call center but in any case, this should be done in a manner that preserves the crucial qualities of speed, convenience and low cost.

It is evident that FinTech will have an extremely important role to play in expanding the future provision of financial services, both in terms of extending these to a wider range of consumers and in allowing customers to gain access to a richer variety of more complex financial products, though all at a lower cost. Because of this, future development of financial services will work best if it is mixed and cooperative: mixed in terms of providing services that combine traditional forms of banking with FinTech services, and cooperative in terms of the need for players from the banking and non-banking sectors to work together to produce new, innovative products that better meet consumer needs.

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