

Internet-Based Products in Islamic Commercial Banks in Indonesia

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ABSTRACT: This paper aims to oversee how Islamic commercial banks in Indonesia adopt information and communication technology to its internet-based financial products and to analyze contributing factors behind such adoption. The data collected covers twelve Islamic commercial banks operating in Indonesia and information on its internet-based financial products. The result suggests that all the banks use automated teller machines as main financial product and seven among the banks provides extra financial products in the form of internet banking via internet, SMS banking via smartphone and others. The limitation of products in some banks can be traced from its length in the industry, capacity of its holding company and its coverage as seen from its offices. This findings imply that development of internet-based products in Islamic commercial banks has still very prospective especially caused by the fast growing access and technology investment in Indonesia.

1 INTRODUCTION

Islamic banks have been part of Indonesia banking industry for more than a decade. The establishment of Bank Muamalat Indonesia in 1992 marked the moment for banking system based on Islamic law and financial rule to take part in daily economic life of people in the most Muslim populated country in the world. During this time, some developments have been made to enhance this new industry: issuance of fatwa on interest bank prohibition by Council of Indonesia Ulama in 2003, issuance of national law on Islamic bank and launching of Islamic banking (iB) as social and economic trend in societies in 2008, and many other policies.

In term of financial institution, Islamic banking industries gained more support from mature conventional banking sector by its inception of Islamic branches as well as fully operating Islamic bank. The number of bank has increased significantly and reached 12 banks fully operating under Islamic banking system until November 2014. In the same time, 22 Islamic branches as part of conventional bank also operate giving more coverage for Muslim society to apply their belief in financial industry.

Academic works have also been done in form of research and studies on the matter of Islamic banking industries in Indonesia. Many researchers have been focusing theirs study in the development of Islamic banks and its product. According to Abduh and Omar

(2012), the development of Islamic banking in Indonesia relates significantly with economic growth both in short-run and long-run. It is a bright indication that the growth in Islamic financial institution contributes in national development.

Other research by Siswanto (2014) confirms that many banks can optimally increase capital injection and investment deposit after fully converted to Islamic bank from its original part of conventional holding company. It could be another reason for foreigners to invest in Islamic business in Indonesia which turns out to be profitable. As for Shaban, Dugun, Anwar, & Akbar (2014), Islamic banks' relatively high willingness to lend small business gives its more benefit in form increasing net interest margin and lower capital.

However, research in Islamic financial product based on internet services is very limited. Researchers mostly focus on the same product in conventional banks. Purwanegara, Apriningsih, & Andika (2014) for example noted unfamiliarity to the law and regulation regarding fraud and claiming procedure in internet banking makes consumers feel unsafe to use the products when it come to a problem. This imply the need for more education program for consumers as the target market of the products.

As Thuiner (2015, p. 104) pointed online banking with internet as its front product will be the best option for both consumers and bankers mainly because it provides better service with less cost. Such trend will also impact Islamic banks so that the discussion

on this matter is very relevant. Furthermore, for Indonesian context, the rapid development in the telecommunications sector has made it important player to stimulate economic growth in the country recently. It grew higher than that of other sectors along with rapid diffusion especially in cellular telephony in the last decade (Rohman & Bohlin, 2014).

From this background, this paper aims to analyze internet-based products offered by Islamic banks in Indonesia especially in term of its availability, types, and factors affecting bank to or not to provide it to consumers. The type of Islamic banks analyzed was commercial one which will be described in the next section. The results will be expected as an early effort to study Islamic banking from its capacity in digital economy.

2 METHODOLOGY

To analyze internet-based financial products of Islamic bank, this paper firstly identifies currently operating and active Islamic banks in Indonesia. As for November 2014, according to Financial Services Authority, Republic of Indonesia (2015) there are 34 banks operating under Islamic law on finance. These banks are categorized as Islamic commercial banks and Islamic business unit. Islamic commercial banks refer to banks fully operate under Islamic financial and national authority rules. There are twelve banks in this category with 439 head operational offices or head offices, 1,514 sub branch offices or sharia services units and 206 cash offices.

Islamic business unit refers to unit within a holding bank operating under Islamic scheme of banking, with its holding remain operating under conventional scheme. The category has 138 head operational offices or head offices, 174 sub branch offices or sharia services units and, 42 cash offices. Aside these two bank categories, Islamic financial services are also provided by Islamic rural banks which as the data have 91 head operational offices or head offices and 184 cash offices in Indonesia.

Table 1. Individual Islamic Banking Network

Group of Banks		HOO/ BO	SBO/ SSU	CO
Islamic Commercial Bank		439	1,514	206
1	Bank Muamalat Indonesia	83	260	104
2	Bank Victoria Syariah	8	11	-
3	BRI Syariah	52	203	10
4	B.P.D. Jawa Barat Banten Syariah	9	56	1
5	BNI Syariah	67	164	17
6	Bank Syariah Mandiri	137	510	65
7	Bank Mega Syariah	35	285	4
8	Bank Panin Syariah	7	5	-
9	Bank Syariah Bukopin	12	8	5
10	BCA Syariah	9	8	-
11	Maybank Syariah Indonesia	1	-	-

Group of Banks		HOO/ BO	SBO/ SSU	CO
12	Bank Tabungan Pensiunan Nasional Syariah	19	4	-
Islamic Business Unit		138	174	42
13	Bank Danamon Indonesia Tbk	25	62	-
14	Bank Permata Tbk	11	2	-
15	Bank Internasional Indonesia Tbk	7	1	-
16	Bank Cimb Niaga, Tbk	5	-	-
17	Bank OCBC NISP, Tbk	8	-	-
18	BPD DKI	2	10	6
19	BPD Yogyakarta	1	2	5
20	Bank Pembangunan Daerah Jawa Tengah	3	4	2
21	BPD Jawa Timur	3	5	-
22	BPD Jambi	1	-	-
23	Bank BPD Aceh	2	14	-
24	BPD Sumatera Utara	5	17	-
25	BPD Sumatera Barat	3	6	-
26	Bank Pembangunan Daerah Riau	2	3	-
27	BPD Sumatera Selatan dan Bangka Belitung	3	1	5
28	BPD Kalimantan Selatan	2	8	1
29	BPD Kalimantan Barat	-	2	4
30	BPD Kalimantan Timur	2	13	-
31	BPD Sulawesi Selatan dan Sulawesi Barat	3	-	1
32	BPD Nusa Tenggara Barat	2	4	1
33	Bank Sinarmas	27	-	10
34	Bank Tabungan Negara (Persero) Tbk.	21	20	7
Islamic Rural Bank		91	-	184
TOTAL		668	1,688	432

* Note: HO = Head Office, HOO = Head Operational Office, BO = Branch Office, SBO/SSU = Sub Branch Office/Sharia Services Unit, CO = Cash Office, Exclude Office Channeling Sources: Financial Services Authority, Republic of Indonesia (2015).

For this research, Islamic banks observed will be limited to the first category, i.e. Islamic commercial banks. The data required for analysis was based on each banks financial products especially the ones having relation with internet or information and communication technology. To obtain the data, a thorough search was conducted on official annual report for public disclosure as well as online information provided by Islamic banks in its official websites. Analysis was then conducted to explore the availability of the products and its coverage.

Although the focus will be in internet products, some related products will be shortly mentioned to comprehend the analysis. Some reason for this can be explained as follow According to Ausfelder (1996 in Seitz & Stickel, 2001) internet serves as electronic channel along with commercial online provider. Other channels are telecommunication and self-service terminal with Automated teller machine (ATM)

and multimedia terminals as its part. These three channels i.e. self-service, telecommunication, and electronic are part of technical channels within a financial institutions.

Some financial innovation and banking in the last three decades can be traced in the form of services offered by commercial banks. ATM was firstly introduced in 1970s and its function gradually taken by debit cards. Internet banking was then became trend in line with the presence of prepaid cards (Frame & White, 2010, pp. 492-495). Profitability and reduced-cost efficiency in online banking (DeYoung, Lang, & Nolle, 2007 and Hernando & Nieto, 2007) make internet adoption in this industry a new frontier to be reached.

From this explanation, it is clear that ATM along with internet and other multimedia tools play important role to distribute financial services in a banking system. Having this in mind, this paper therefore will discuss ATMs or other banking facilities besides specific internet-based products which are the focus of the study. Discussing other facilities imply their relation with internet as well as their original function in financial services which then was improved by the presence of internet.

3 RESULTS AND DISCUSSION

Among all twelve operating Islamic commercial banks, ATMs as self-service terminal are facilities available mostly in cities in Indonesia. Besides ATMs, Islamic commercial banks provide several products ranging from internet banking access via internet, mobile access via smartphones, and many others. However, not every Islamic commercial banks provide these products. The following passage will explain types of products offered by Islamic commercial banks and the will be followed by discussion on why some banks do not provide the same products.

3.1 *Bank Muamalat Indonesia*

Bank Muamalat Indonesia provides MuamalatMobile and Internet Banking (IB) Muamalat as its front internet-based financial services to its consumers. MuamalatMobile is created for phones based on GPRS which allows consumers to check their account including latest financial activities, to transfer across Bank Muamalat Indonesia account holders, and to access several information about the bank and foreign exchanges. IB Muamalat allows consumers to check their accounts information, to transfer, to pay for several purposes and to pay phone pulse, electricity bill, and some entertainment facilities. Furthermore, the facility can also be used for transaction in several

merchants having agreements with the bank. This facility makes consumers have more choices for their shopping payment.

3.2 *BRI Syariah*

BRI Syariah provides consumers six electronic products for their activities: ATM Card or Debit Card, Co-Branding Card, Cash Management System, University/School Payment System, SMS Banking, Remittance, and Electronic Data Capture of Mini ATM. ATM Card allows consumers to withdraw cash, to transfer, to access account information, to pay for electricity and phone bills as well as alms-giving. All these transactions can be done in BRI Syariah ATM, BRI ATM, ATM Bersama, and ATM Prima. Cash Management System, can be viewed as e-banking product of BRI Syariah, SMS Banking and EDC Mini ATM also provide transactions above. Cash Management System can do extra service in e-payroll for consumers. Co-Branding Card is aimed to provide special characteristics for specialized group of consumers to maintain their loyalty to product. The card enables its users to access facilities embodied in ATM Card. From its name, University/School Payment System allows students or their parents to pay several administrative payments for schools and universities. BRI Syariah Remittance allows consumers to receive notification about incoming transfer especially from their family members working abroad and to make it cash in the bank. The product by design was aimed to provide alternative assistance for Indonesian workers.

3.3 *BPD Jawa Barat Banten Syariah*

BPD Jawa Barat Banten Syariah provides mobile masalah for consumers as its main mobile banking facilities. The product allows consumers to check their account information, to transfer among the bank account holders as well as across banks in ATM Bersama networks, to pay several recurring bills and vouchers. This mobile banking facility works under most operating system i.e. Java, Blackberry, Android and iOS. Consumers also can access 65 ATMs around West Java and Banten provinces along with ATM Bersama networks.

3.4 *BNI Syariah*

BNI Syariah internet-based products include SMS Banking and Internet Banking Feature. The bank also give opportunity to consumers to do wider transaction with Hasanah Card, an Islamic-based credit card. SMS Banking provides consumers access to their account information and allow them to do some financial transactions such as transfer among BNI or BNI Syariah account holders, payment of prepaid phone voucher and payment of Hasanah Card. Internet

Banking Services give consumers various financial transactions such as inter-account transfers, transfer to an account at another bank, payment of bills for postpaid phone voucher and electricity in specific areas, prepaid voucher purchases, airline ticket purchases, tuition payment of various universities, bill payment Hasanah Card and payment of zakat, infaq and shadaqoh.

3.5 *Bank Syariah Mandiri*

Bank Syariah Mandiri provides many internet-related products to its customers: ATM, E-Money, Mobile Banking and SMS Banking. Consumers can use ATM for several transactions such as common banking activities (checking for latest account, cashing, changing PIN, and fund transfer), paying electricity bill, as well as cellular phone payments. E-Money consists some facilities embodied in BSM Card that allow consumers to pay toll bills in most of highways in Indonesia (Jabodetabek & Bandung, Cirebon, Semarang, Surabaya, Medan, and Bali), bus and train ticket, selected parking area, fuel in selected area, products of some merchants (Indomaret, Alfamaret, Alfamidi, Lawson, Circle-K, Superindo, 7-Eleven, Hypermart, Family Mart), food and beverage in some merchants (Solaria, Excelso, Es Teller 77, Holland Bakery), and entry tickets in some recreation park (Amazona, Waterboom Cikarang, Wonder Water World Medan). Consumers of Bank Syariah Mandiri also can use some facilities above through BSM Mobile Banking. As for BSM SMS Banking, some facilities available are limited to several information and transactions.

3.6 *Bank Syariah Bukopin*

Internet-based products provided by Bank Syariah Bukopin are ATM iB SiAga and Cash Management. The ATM provides consumers with facilities such as account information, transfer, payments for electricity, prepaid phone, and credit card bills, and payment of religious financial duties (zakat, shadaqoh, and infaq). The ATM networks of the bank covers 27 outlets with extra support from Bank Bukopin ATM as its holding company. Cash management allows consumers to access account inquiries and do real time on-line transactions. This facility is operated under Windows platform and allows multilevel users authority to the account.

3.7 *BCA Syariah*

Internet-based product provided by BCA Syariah includes networks of BCA ATM Card and Debit Card, networks of ATM Prima, and BCA Syariah Mobile. Bank Central Asia, holding company owning majority stock, provides BCA Syariah with large access to its ATM and Debit Card networks. Since BCA is the

largest providers for ATM in Indonesia, this privilege gives BCA Syariah many advantages. Along with BCA ATM, BCA Syariah consumers also gain extra services with the extension of ATM Prima networks. BCA Syariah also provides mobile banking facilities accessible from mostly used smartphones: BlackBerry, Android, and iPhone. The facilities allow consumers to check information on and administrate their accounts, and to transfer for various purposes such as transferring to the same or different banks and paying religious financial duties in form of zakat, shadaqoh and infaq.

For other Islamic commercial banks, financial product offered to consumers with internet as its base is very limited. This may be caused by the relatively new bank operating which imply the limited need to such products. Bank Victoria Syariah for example was established in April 1, 2010 (Bank Victoria Syariah, 2015), Bank Mega Syariah started its operation in August 25, 2004 (Bank Mega Syariah, 2015) and Bank Panin Syariah operated from 2 December 2009 (Bank Panin Syariah, 2015). Other banks i.e. Bank Syariah Bukopin, Bank Maybank Syariah Indonesia and Bank Tabungan Pensiunan Nasional Syariah operated on 11 December 2008 (Bank Syariah Bukopin, 2015), October 2010 (Maybank Syariah, 2015) and 22 Mei 2014 (BTPN Syariah, 2015) respectively.

Other reason of this limited products is bank expansion in term of branches and offices. As the data form Financial Services Authority, Republic of Indonesia (2015) in table 1 above, banks with more sub branch offices or sharia services units tend to have more options in financial products for its consumers with internet. Bank Muamalat Indonesia, BRI Syariah, BNI Syariah and Bank Syariah Mandiri for example have wider branches that makes them relatively relevant in creating more internet-based products. With large portion of its holding company in banking industry these banks have advantages in distribution of information of its products as well as its accessibility in the reach of consumers.

The result above indicates the variety of adoption type in Islamic banks to current trend in internet-based financial products. Along with fast trend in information and communication technology available, larger Islamic commercial banks supply more products to consumers in comparison to the smaller ones. For local-based Islamic commercial banks, the financial products are mostly limited to what commonly provided by other banks.

These findings imply simple assumption on how the cost of internet-based financial product might play important role in bank decision whether to use it or not. It is noteworthy that adoption and implementation of information and communication technology in banking industry requires a high level of investment in infrastructure as well as in workforce. Without enough preparation and capitalization, it is obviously a hard task for banks to fulfill.

However, increasing internet-based products in Islamic banks as well as in conventional one have important role in accelerating Indonesia's financial inclusion. The inclusion is fundamentally believed as the next source for capitalization in domestic market especially in its emerging path. With less than 20% of its population having access to financial institution (World Bank, 2011), internet may be the right answer to address the challenge of financial inclusion in Indonesia.

On the other hand, creating more internet-based products for Islamic commercial bank can prospectively increase consumers' awareness of the banks. As many researchers suggest financial performances of Islamic commercial banks in Indonesia are highly related to its counterpart of conventional ones (Kasri & Kassim, 2009 and Hutapea & Kasri, 2010). From this point, increasing quality in internet-based financial product may lead to a better competition with conventional banks. Moreover, Bank of Indonesia campaign on non-cash transaction may also be inspiring factor to accelerate the initiation of internet as base for financial services in Islamic commercial banks in Indonesia.

4 CONCLUSION

The explanation above indicates relatively limited adoption of information and communication technology in term of financial products by Islamic commercial banks in Indonesia. Only bank with large capitalization and big market share tend to provide consumers with such products. However, as the technology develops fast and most consumers grow familiarity with many technological devices along with trend in e-commerce it is noteworthy that Islamic commercial banks in Indonesia are suggested to take the opportunity to enhance its products.

As an elementary effort to analyze internet-based products in Islamic commercial banks, this paper has many limitation such as its coverage only to product details and not on its application according consumers' experience. Although it has such limitations, the provided backgrounds for further studies are likely useful for other researchers having interest in Islamic finance in Indonesia.

Further direction for the research in the field can be in analyzing recent trends of internet banking products in Islamic banks in relation with their counterparts in business: conventional banks. The research can also be addressed to answer the challenge in implementing the internet adoption by Islamic banks as well as its reception by consumers.

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6 REFERENCES

- Abduh, M., & Omar, M. A. (2012). Islamic Banking and Economic Growth: the Indonesian Experience. *International Journal of Islamic and Middle Eastern Finance and Management*, 5(1), 35-47. doi:10.1108/17538391211216811
- Ausfelder, R. (1996). *Die Einföhrung von Telebanking als Vertriebswege-Entscheidung von Kreditinstituten*. Frankfurt: Universitiit Passau.
- Bank of Indonesia. (2002). *The Blueprint of Islamic Banking Development in Indonesia*. Jakarta: Bank of Indonesia.
- Bank Panin Syariah. (2015). *Profil Perusahaan*. Retrieved from Bank Panin Syariah: <https://paninbanksyariah.co.id/index.php/mtentangkami>
- Bank Syariah Bukopin. (2015). *Sejarah Bank Syariah Bukopin*. Retrieved from Bank Syariah Bukopin: <http://www.syariahbukopin.co.id/page/content/2/1>
- Bank Syariah Mega Indonesia . (2015). *About Mega Syariah*. Retrieved from Bank Syariah Mega Indonesia : <http://www.megasyariah.co.id/#article6>
- Bank Victoria Syariah. (2015). *Profil*. Retrieved from Bank Victoria Syariah: <http://bankvictoriasyariah.co.id/page/sub/profil>
- BCA Syariah. (2015). *Sejarah*. Retrieved from BCA Syariah: <http://www.bcasyariah.co.id/profil-korporasi/sejarah/>
- BTPN Syariah. (2015). *Profil*. Retrieved from BTPN Syariah: <https://www.btpnsyariah.com/tentang-kami/profil>
- DeYoung, R., Lang, W. W., & Nolle, D. L. (2007). How the Internet Affects Output and Performance at Community Banks. *Journal of Banking & Finance*, 31(4), 1033–1060. doi:10.1016/j.jbankfin.2006.10.003
- Financial Services Authority, Republic of Indonesia. (2015). *Islamic Banking Statistics November 2014*. Jakarta: Bank Licensing and Banking Information Department, Financial Services Authority, Republic of Indonesia. Retrieved from <http://www.bi.go.id/id/statistik/perbankan/syariah/Documents/SPS%20November%202014.pdf>
- Frame, W. S., & White, L. J. (2010). Technological Change, Financial Innovation, and Diffusion in Banking. In A. N. Berger, P. Molyneux, & J. O. Wilson (Eds.), *The*

Oxford Handbook of Banking (pp. 486-507). New York: Oxford University Press.

- Hernando, I., & Nieto, M. J. (2007). Is the Internet Delivery Channel Changing Banks' Performance? The Case of Spanish Banks. *Journal of Banking & Finance*, 31(4), 1083–1099. doi:10.1016/j.jbankfin.2006.10.011
- Hutapea, E. G., & Kasri, R. A. (2010). Bank Margin Determination: A Comparison Between Islamic and Conventional Banks in Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, 3(1), 65-82. doi:10.1108/17538391011033870
- Kasri, R., & Kassim, S. H. (2009). Empirical Determinants of Saving in the Islamic Banks: Evidence from Indonesia. Retrieved from <http://ssrn.com/abstract=1685226>
- Maybank Syariah. (2015). *In a glance*. Retrieved from Maybank Syariah: <http://maybanksyariah.co.id/pages/27/in-a-glance>
- Purwanegara, M., Apriningsih, A., & Andika, F. (2014). Snapshot on Indonesia Regulation in Mobile Internet Banking Users Attitudes. *Procedia - Social and Behavioral Sciences*, 115, 147–155. doi:10.1016/j.sbspro.2014.02.423
- Rohman, I. K., & Bohlin, E. (2014). Decomposition Analysis of the Telecommunications Sector in Indonesia: What Does the Cellular Era Shed Light On? *Telecommunications Policy*, 38(3), 248–263. doi:10.1016/j.telpol.2013.10.006
- Seitz, J., & Stickel, E. (2001). Internet Banking - An Overview. In S. E. B.V. (Ed.), *Electronic Banking: The Ultimate Guide to Business and Technology of Online Banking* (pp. 67-77). Braunschweig/wiesbaden: Friedr. Vieweg & Sohn Verlagsgesellschaft mbH.
- Shaban, M., Duygun, M., Anwar, M., & Akbar, B. (2014). Diversification and Banks' Willingness to Lend to Small Businesses: Evidence from Islamic and Conventional Banks in Indonesia. *Journal of Economic Behavior & Organization*, 103(Supplement), S39–S55. doi:10.1016/j.jebo.2014.03.021
- Siswantoro, D. (2014). Analysis of Islamic Bank's Performance and Strategy After Spin-off as Islamic Full-fledged Scheme in Indonesia. *Procedia - Social and Behavioral Sciences*, 164, 41–48. doi:10.1016/j.sbspro.2014.11.048
- Thuiner, S. (2015). *Banks of the Future: Putting a Puzzle Together Creatively*. Heidelberg: Springer International Publishing. doi:10.1007/978-3-319-07554-9
- World Bank. (2011). Financial Inclusion Data: Indonesia. Retrieved from <http://datatopics.worldbank.org/financialinclusion/country/indonesia>