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The Identity Challenge in Finance: From Analogue Identity to Digitized Identification to Digital KYC Utilities

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Abstract

Identity is fundamental in finance: to protect against fraud and crime, to fulfil know-your-customer obligations, and to ensure market integrity. At the same time, identification and know-your-customer rules can be major barriers to accessing financial services. This paper considers the various requirements for identification in the financial sector and the evolving nature of identity. We argue that technology presents an opportunity to solve this challenge through the development of digital identity infrastructure and related utilities. The establishment of such utilities requires addressing design questions such as registration methods, data availability, and cross-jurisdiction recognitions. Yet, as with any reform, a balance between flow through efficiency and cyber-security needs to be reached to ensure that the objectives of financial inclusion and market integrity are not achieved to the detriment of financial stability.

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Notes

1. See Zetzsche et al. (2018).

2. For example, the Google email identity may be used to certify a personality for the online accommodation service Airbnb.

3. Kulp (2017).

4. The degree of electronic identification depends on the business model. For example, accommodation providers such as Airbnb require digital passport copies, car rental service providers require a digital copy of a driver's licence, etc.

5. For the European Union, see: Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No. 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC [2015] OJ L141/73–117 (European Parliament 4th AML Directive); for Hong Kong, see (a) Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) (Amendment) Ordinance 2018, (b) Organized and Serious Crimes Ordinance (Cap. 455), (c) Drug Trafficking (Recovery of Proceeds) Ordinance (Cap. 406), and (d) United Nations (Anti-Terrorism Measures) Ordinance (Cap. 575); for Singapore, see the Monetary Authority of Singapore's various notices and guidelines on AML/CFT, available at http://bit.ly/2p5BgJX; and for Australia, see Anti-Money Laundering and Counter-Terrorism Financing Act 2006 (Cth).

6. For the European Union, see Art. 25 of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No. 648/2012 [2014] OJ L173/84/349–496.

7. Asian Development Bank (2016).

8. International Finance Corporation (2017), p 13.

9. For example, the Hong Kong Monetary Authority issued a circular on de-risking and financial inclusion to banks operating in Hong Kong: Hong Kong Monetary Authority (2016).

10. Global Partnership for Financial Inclusion (2017), International Finance Corporation (2018), and World Bank Group (2018), p 1.

11. Financial Action Task Force (2018).

12. Schwab (2016).

13. Ibid.

14. Arner et al. (2017).

15. Litan (2016).

16. International Bar Association Legal Practice Division Working Group (2015), p 11.

17. Zetzsche et al. (2018).

18. Arner et al. (2016).

19. See, Zetzsche et al. (2018) and Arner et al. (2016).

20. Noto (2017).

21. Donnelly (2018).

22. Smith (2017).

23. International Bar Association Legal Practice Division Working Group (2015), pp 5–6.

24. World Economic Forum (2018).

25. World Bank (2017).

26. Morozov (2013).

27. Kumar and Pathak (2014). For details, see Arner et al. (2018).

28. For example, see International Bar Association Legal Practice Division Working Group (2015); Bracken (2012).

29. Pesin (2017).

30. See, Hardjono et al. (2016).

31. Reuters (2018).

32. For details, see Weigend (2017).

33. See, Lanier (2013).

34. Ibid.

35. Token Commons, The Windhover Principles for Digital Identity, Trust, and Data, 21 September 2014, http://tokencommons.org/Windhover-Principles-for-Digital-Identity-Trust-Data.html (accessed 11 December 2018).

36. Todd (2014).

37. Ibid.

38. Clippinger (2015).

39. Arner et al. (2017).

40. Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU [2014] OJ L 173/349.

41. Regulation (EU) No. 910/2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC [2014] OJ L257/73.

42. Unique Identification Authority of India, About Aadhaar, https://uidai.gov.in/your-aadhaar.html (accessed 11 December 2018) and Unique Identification Authority of India, Aadhaar data update, https://uidai.gov.in/enrolment-update/aadhaar-enrolment/aadhaar-data-update.html (accessed 11 December 2018).

43. Abraham et al. (2017).

44. ‘Indian business prepares to tap into Aadhaar, a state-owned fingerprint identification system’, *The Economist*, 24 December 2016.

45. Australian Government Govpass, Digital Transformation Agency, Canberra, https://www.dta.gov.au/what-we-do/platforms/govpass/ (accessed 11 December 2018).

46. Council of Australian Governments (2017).

47. These include the face identification service, facial recognition analysis utility service, face verification service, identity data sharing service, and one person one licence service.

48. For the US, see Quarmby (2003).

49. See, Identity Documents Bill 2010 (UK).

50. See, Art. 5 of Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures [2000] OJ L13/12.

51. For the European Commission, see Kirova (2016).

52. Ibid.

53. See, Art. 11 of the eIDASR.

54. European Commission (2017b).

55. European Commission (2017a).

56. See, European Commission (2017c).

57. See, Arner et al. (2018).

58. For a comprehensive discussion, see Arner et al. (2018), p 13.

59. The technique was first introduced in 2015 and 2016 and clarified in later regulatory releases. For Germany, see BaFin Federal Financial Supervisory Authority (2017); for Luxembourg, see Commission de Surveillance du Secteur Financier (2018); for Switzerland, see FINMA (2016).

60. See, Art. 26 of Regulation (EU) No. 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No. 648/2012 [2014] OJ L173/84.

61. Financial Action Task Force (2018), p 8.

62. Stanley and Buckley (2016).

63. LexisNexis (2016).

64. ThomsonReuters, The South African KYC Service, https://africa.thomsonreuters.com/en/products-services/risk-management-solutions/kyc-as-a-service.html (accessed 11 December 2018).

65. IIFL (2014).

66. For example, see RBL Bank's Abacus Digital Savings Account (temporarily disabled because of the recent Supreme Court Judgement); and HDFC Bank's digital Instant Account: HDFC Bank, Account kholo chutki mein, https://www.hdfcbank.com/htdocs/digital-campaign/instantaccounts.html (accessed 11 December 2018).

67. For distributed ledgers, see Zetzsche et al. (2017).

68. Ibid.

69. For example, see Art. 25(1) of the European Parliament 4th AML Directive (above n. 5).

70. See, Joint Committee of the European Supervisory Authorities, Joint Guidelines under Articles 17 and 18(4) of Directive (EU) 2015/849 on simplified and enhanced customer due diligence and the factors credit and financial institutions should consider when assessing the money laundering and terrorist financing risk associated with individual business relationships and occasional transactions—The Risk Factors Guidelines, JC 2017/37, 26 June 2017, Title III, Ch. 1, No. 81, 83.

71. See, Association of the Luxembourg Fund Industry (2018).

72. See, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation*)* [2016] OJ L119/1.

73. Zetzsche et al. (2017).

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