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# Survey on Digitalisation and Fintech at Swiss Banks 2019

SCHWEIZERISCHE NATIONALBANK  
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BANCA NAZIONALE SVIZZERA  
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SWISS NATIONAL BANK





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# Survey on Digitalisation and Fintech at Swiss Banks 2019

Report on results



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# 1

## Introduction

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As part of its statutory mandate, the Swiss National Bank keeps track of developments in the digitalisation of the financial system, focusing on the implications for the implementation of monetary policy, the operation of cashless payment systems, and the stability of the financial system.

In the fourth quarter of 2018, the SNB conducted a survey on digitalisation and fintech at Swiss banks.<sup>1</sup> It did so above all with financial stability in mind, with the aim of gaining a representative picture of how digitalisation is influencing banks operating in the deposits and lending business.

The sample comprises 34 Swiss banks predominantly active in the deposits and lending business. It takes the corresponding bank categories into account and is representative in terms of the size of the banks. The banks included in the sample make up around 80% of the assets of the banking sector relevant for the survey. The SNB welcomes the fact that all those banks asked to participate in the survey did so, and emphasizes the high quality of the answers received. An information event was held for the respondents at which the results were presented and discussed.

This report sets out the main results of the survey and is structured as follows. Chapter 2 summarises the key findings and covers the issues relevant for financial stability. Chapter 3 presents the results in detail: (i) the banks' general assessment of the impact of digitalisation on banking in Switzerland; (ii) the banks' strategic focus; (iii) specific digitalisation strategies in core business segments; and (iv) the banks' assessment of fintech regulation in Switzerland.

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<sup>1</sup> **Digitalisation** is defined as the automation of processes by applying information and communication technologies. The term **fintech** is used to cover technology-based innovations in financial services that could lead to new business models, applications, processes or products with a significant impact on the provision of financial services. For the sake of simplicity, the term 'digitalisation' is used here in a broad sense and also covers fintech aspects such as new products and market participants.

# 2

## Summary

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Overall, the survey indicates that the banks expect a strong level of digitalisation in financial intermediation. They view this mainly as a source of opportunities, particularly with regard to cutting costs and improving service quality. However, they also highlight the attendant challenges – in particular increasing competition, both with other banks and with new market participants such as bigtechs and digital banks.<sup>2</sup> Against this backdrop, they are seeking to achieve ambitious digital maturity targets, and are investing in innovation or acquiring innovative solutions from specialised firms such as fintechs.<sup>3</sup> Digitalisation strategies and the corresponding objectives vary depending on the size of the financial institution.

### KEY FINDINGS

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**In the longer term, the banks envisage themselves continuing to play a central role in financial intermediation, albeit amid heightened competition and significant digitalisation of financial services.**

They believe that customers are less likely to maintain a permanent relationship with a single financial institution in the future, and will instead increasingly turn to different intermediaries from the banking and non-banking sectors to find the best service. In certain segments, such as payments and corporate lending, bigtechs and digital banks could emerge as important competitors – the former on account of their size and access to customer data and the latter thanks to their technological lead. By contrast, fintechs are seen more as partners given their modest size and specialised focus.

**At the strategic level, the banks are seeking to bring their existing business models to a high level of digital maturity with the aim of cutting costs and retaining their attractiveness to customers.** An advanced level of digital maturity has already been attained in deposits and payments. Other digitalisation efforts relate to the automation of account opening and enhanced user-friendliness in response to the market entry of bigtechs and digital banks. The majority of larger banks plan extensive process digitalisation in the area of mortgage lending to households. However, there is a large gap between the current and targeted levels in this respect.

In the future, credit checks, decisions on granting loans, and ongoing borrower monitoring are to be digitalised. In the banks' view, advisory services and personal contact will continue to play an important role and will be supported by digitalised processes.

**Digitalisation strategies vary greatly depending on the size of the bank.** The larger banks have set themselves more demanding digitalisation targets than their smaller counterparts, in particular in the mortgage business.<sup>4</sup> Furthermore, larger banks have already achieved a higher level of digital maturity. The differences are less pronounced in deposits and payments, where all banks are already well advanced in terms of digitalisation. In their innovation strategies, the larger banks are focusing on developing proprietary solutions, with priority being given to biometric identification and robotics. The smaller banks are working with fintechs or acquiring innovations from third-party providers.

**As regards customers' usage of digital channels, the responses received from banks differ considerably.** In the payments area, the use of digital offerings is systematically recorded. Customer use of e-banking services is high. When it comes to opening a deposit account or establishing a lending relationship, digital channels are used less frequently. However, the banks' responses vary markedly here.

**The majority of banks find the regulatory regime to be appropriate, but specific areas requiring improvement are also mentioned.** The most commonly cited obstacles are the lack of a statutory basis for electronic IDs and the necessity of having physical documents and signatures for certain transactions.

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<sup>2</sup> **Bigtechs:** Large technology companies (e.g. Google, Apple, Facebook, Amazon). **Digital banks:** Banks that seek to acquire new customers with innovative and exclusively digital offerings and that do not operate any bricks-and-mortar branches.

<sup>3</sup> **Fintechs:** Specialist companies that do not hold a banking licence, that develop innovative financial services, and/or base their business model on such innovations.

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<sup>4</sup> 'Larger' banks comprise the 15 largest banks in the sample (in terms of balance sheet total), including systemically important banks, large and medium-sized cantonal banks, and large regional banks. 'Smaller' banks comprise the 19 smallest banks in the sample, including small cantonal banks as well as small and medium-sized regional banks.

## ASSESSMENT OF RESULTS AND OUTLOOK

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The SNB survey is based on a representative sample. Overall, the results are consistent with those of other surveys.<sup>5</sup> However, as with any forward-looking survey of a qualitative nature, a degree of caution must be exercised in interpreting the findings. They present a snapshot of a dynamic area.

The SNB will continue to monitor developments unfolding in the area of digitalisation in collaboration with the participants in the financial system. The following issues are worthy of particular attention.

**To what extent will the banks achieve their high digital maturity targets, and what impact will this have?** There is a substantial gap between the current and targeted level of digitalisation in the case of the larger banks. This implies some uncertainty with respect to the implementation of digitalisation strategies and the extent of the cost reductions, but also with respect to the banks' ability to retain clients. For the smaller banks, which have less ambitious digitalisation targets, the question of optimal positioning also arises. Will factors such as a local presence, loyalty and personal contact with customers be sufficient to compensate for potential differences in process efficiency? Collaboration between banks and with fintechs may provide a route to the critical mass needed for investment in innovation.

**How are margins in the banking sector set to develop?** Digitalisation and collaboration with fintechs offer opportunities to cut costs against a backdrop of historically low margins. On the other hand, the expected heightening of competition could bring additional pressure to bear on margins. In the long term, margins will play a key role in risk coverage, capital base strengthening and investment financing.

**How dominant will new participants such as fintechs, bigtechs and digital banks become in the Swiss market?** Although there have been significant developments in certain segments, the entry of such players into the market has thus far been relatively modest.<sup>6</sup> However, customer habits and preferences could change strongly in the future. Moreover, digitalisation also facilitates scalability, i.e. the ability to rapidly increase the volume of services offered and thus profit from economies of scale. In addition to heightening competition, strong market penetration by new participants would change the way financial intermediation works, thus impacting an area traditionally dominated by banks.

**How will the structure of the banking sector develop?** Bank density in Switzerland is particularly high, and the number of branches per capita is above the international average. The number of banks per inhabitant is also high, as is the proportion of small banks. In this regard, digitalisation may be an additional factor that contributes to consolidation in the banking sector.<sup>7</sup> Regional banks experienced a wave of restructuring back in the 1990s, and the private banking sector has been consolidating for some years now.

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<sup>5</sup> The 'Digital Pulse Check 3.0 Switzerland vs. Europe' survey conducted by the Swiss Finance Institute and zeb also reveals that there is a sizeable gap between the status quo and the digital maturity level banks aim to achieve. It likewise highlights differences between larger and smaller banks in respect of digitalisation.

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<sup>6</sup> The 'IFZ Fintech Study 2019' conducted by the Institute of Financial Studies Zug (IFZ) gives an overview of domestic fintechs. Despite relatively strong growth, financing via digital platforms (crowdlending/crowdfunding) remains low compared to traditional bank loans. However, there have been significant developments in the area of payments. Digital banks are offering innovative payment services that are very attractive in terms of fees, particularly for cross-border transactions or transactions in foreign currencies.

<sup>7</sup> According to the Banking Barometer published by EY in December 2018, most Swiss banks expect to see a marked reduction in the number of banks and the number of branches over the medium term.



### 3.1. BANKS' ASSESSMENT OF THE IMPACT OF DIGITALISATION ON BANKING IN SWITZERLAND

#### Traditional business model persists; digitalisation, fragmentation and competition on the rise.

The survey first asked banks to outline their expectations regarding the development of Swiss banking in general. They were given a list of five possible scenarios and were asked to select the one they thought most probable. These scenarios are based on the document 'Sound Practices – Implications of fintech developments for banks and bank supervisors' published by the Bank for International Settlements (BIS).

The results show that virtually all banks regard the 'distributed bank' and 'better bank' scenarios as being the most likely (cf. chart 1). In the 'distributed bank' scenario, increasing digitalisation and the entry of new, specialised market participants – such as bigtechs, digital banks and fintechs – mean that customers will no longer have a permanent relationship with just one bank in the future, but will instead compare banking services digitally and obtain such services from more than one intermediary (banks as well as non-banks). The 'better bank' scenario envisages banks modernising organically and digitalising further in order to meet customer requirements more efficiently and effectively.

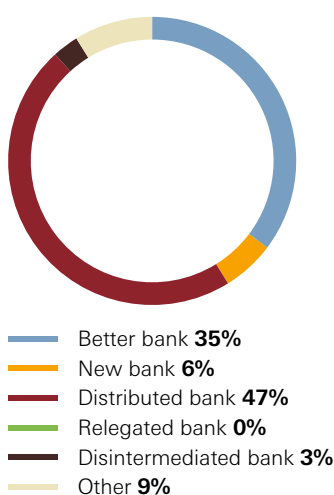
The banks regard disruptive scenarios as unlikely, however.<sup>8</sup> In such scenarios, traditional banks would be marginalised, ceding direct customer contact and being replaced by new market participants. The traditional business model of the banks would disappear.

Irrespective of the scenario, the banks envisage increasingly fierce competition among the incumbent market participants. They also indicate that this competition will be intensified further by digital banks and bigtechs entering the market (cf. chart 2). By contrast, fintechs are viewed more as partners than competitors.

#### LONG-TERM DEVELOPMENT OF THE SWISS BANKING LANDSCAPE

All banks

Chart 1

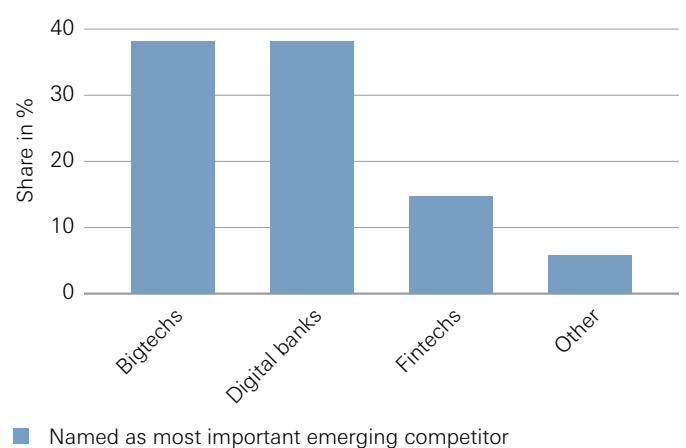


Source: SNB

#### EMERGING COMPETITORS

All banks

Chart 2



■ Named as most important emerging competitor

Source: SNB

<sup>8</sup> Such scenarios include: 'the new bank' (replacement of incumbent banks by new market participants entering the traditional banking business); 'the relegated bank' (incumbent banks are merely providers of standardised services – such as operational processes or risk management – for new market participants, with the latter having the direct customer relationship); and 'the disintermediated bank' (traditional banking intermediation becomes irrelevant as customers interact directly via platforms).

The banks surveyed see digital banks emerging as new challengers in all key business segments over the next three years (cf. chart 3). By contrast, as chart 4 shows, they expect fresh competition from bigtechs primarily in the areas of payments and ‘other lending’ (i.e. lending other than mortgages, such as consumer loans or corporate lending). They anticipate less competitive pressure from bigtechs in the mortgage and wealth management businesses.

**Digitalisation having significant impact on payments, mortgages and internal processes.**

The banks expect digitalisation to have an impact primarily on business segments with a high degree of standardisation and high volumes, as well as those areas where customer needs are changing significantly. Particular reference was made here to payments and

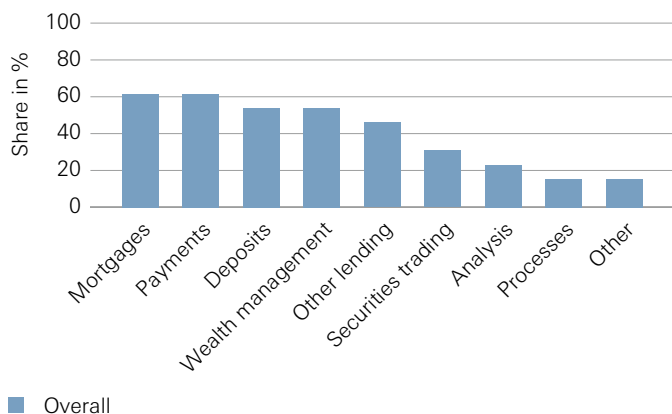
the mortgage business (cf. chart 5). The banks surveyed also expect internal processes to be heavily affected by digitalisation given their high potential for standardisation. Such processes – client data management being one example – support a range of different functions rather than a single business area.

**Opportunities outweigh risks.**

As regards opportunities and risks, the prevailing view among the banks is that when it comes to digitalisation, the former outweigh the latter (cf. chart 6). This opinion is particularly prevalent among the larger banks. The main opportunities lie in cutting costs through increased automation, but also in better customer retention thanks to user-friendly offerings and in accessing new income streams. The key risks cited by the banks are the erosion of margins and the possible loss of direct customer interfacing.

**AREAS WHERE DIGITAL BANKS ARE BECOMING ACTIVE**

All banks Chart 3

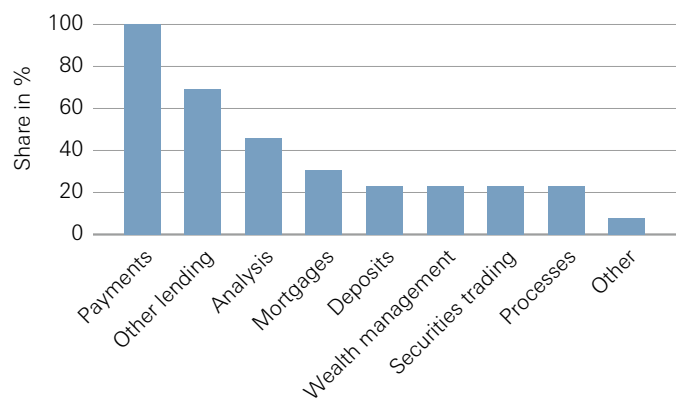


Overall

Source: SNB

**AREAS WHERE BIGTECHS ARE BECOMING ACTIVE**

All banks Chart 4

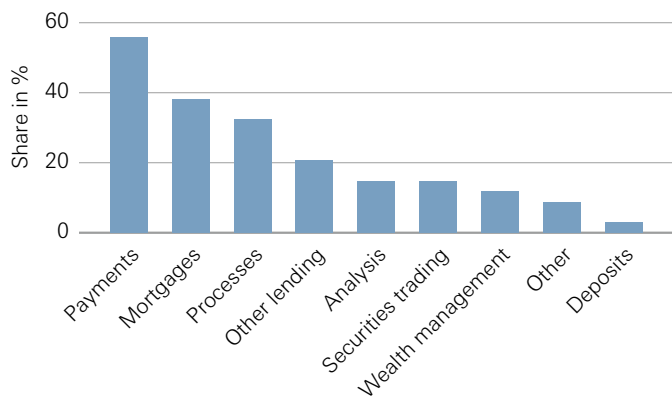


Overall

Source: SNB

**DIGITALISATION: AREAS AFFECTED**

All banks Chart 5

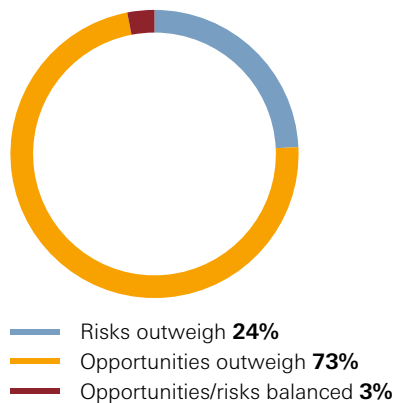


Named as most/second-most important affected area

Source: SNB

**DIGITALISATION: OPPORTUNITIES VS RISKS**

All banks Chart 6



Source: SNB

### 3.2. BANKS' DIGITALISATION STRATEGIES

#### Focus on digitalisation of existing business areas and processes; few new products and services.

The banks were also asked about their strategic focus with regard to digitalisation. Their strategic efforts will be concentrated on the increased digitalisation of their existing business areas, in particular *payments* and the *mortgage business*, as well as *internal (cross-business) processes*.

The majority of banks are also supplementing the digitalisation of their existing business areas with products and services typically offered by new market participants (cf. chart 7, 'Dual strategy'). Examples include the payment app Twint, the provision of crowdfunding/crowdlending platforms, and robo-advisory offerings.

As the survey shows, however, the provision of new offerings is of secondary importance to the ongoing digitalisation of existing business areas (cf. chart 8). The share of investment in digitalising existing business areas is thus substantially higher than that going into devising new business areas and new products and services.

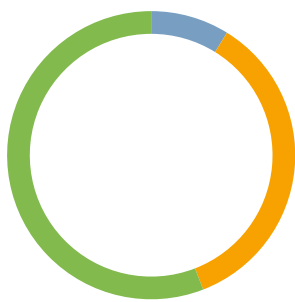
#### Mainly larger banks want to offer their own innovations and are using new technologies in doing so.

In implementing their digitalisation strategies, the larger banks are focusing on deploying their *own innovations* and solutions (cf. chart 9). They are also seeking to engage in *cooperation* with other market participants, above all with fintech firms and providers of core banking systems (CBSs). Meanwhile, smaller banks are predominantly opting for *cooperation* with a wide range of market participants and to some extent for *outsourcing*, but less so the development of their own innovative solutions.

#### DIGITALISATION STRATEGY

All banks

Chart 7



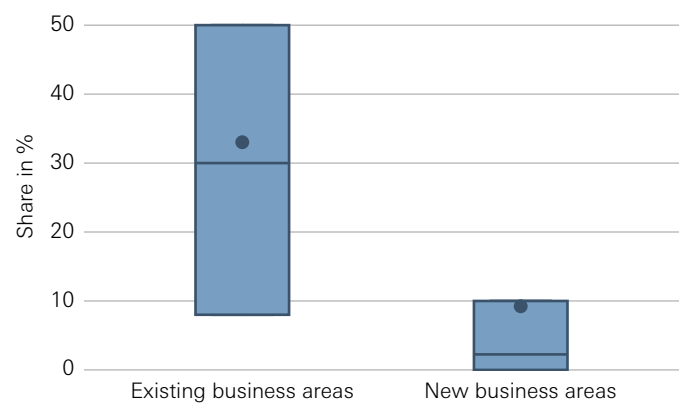
- No change **9%**
- Increased digitalisation of existing business areas **35%**
- Transformation into fintech company/digital bank **0%**
- Dual strategy: digitalisation and transformation **56%**

Source: SNB

#### SHARE OF TOTAL INVESTMENT IN DIGITALISATION

All banks

Chart 8

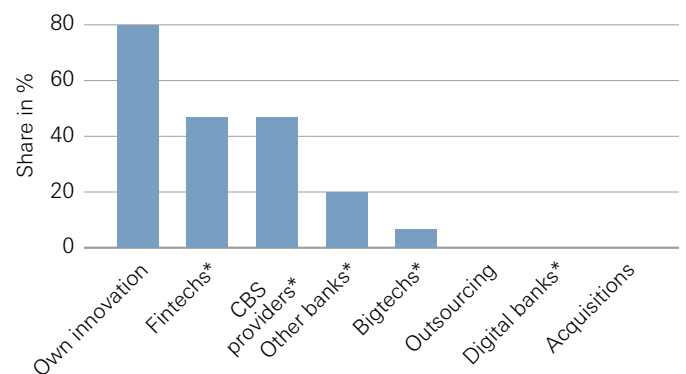


Bounds show 1st quartile, median and 3rd quartile. Marker shows the average.  
Source: SNB

#### STRATEGICALLY IMPORTANT MEASURES

Larger banks

Chart 9



■ Named as most/second-most important strategic measure

\* Cooperation/collaboration with relevant market participants.

Source: SNB

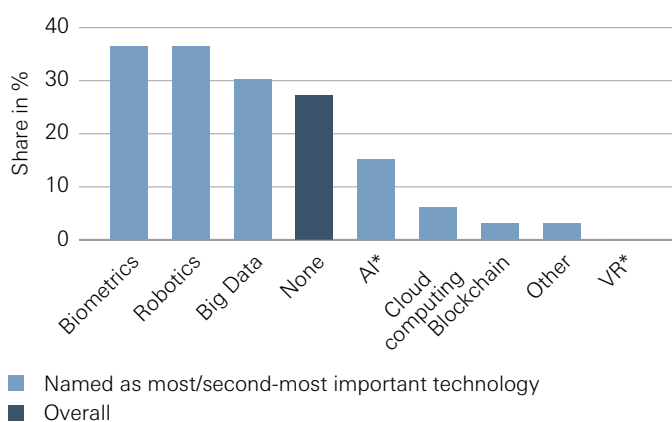
Looking to the next three years, the banks see three technologies as being particularly relevant: *biometrics/digital identity, robotics/automation* and *big data* (cf. chart 10).

**Blockchain, cloud computing and artificial intelligence less relevant for banks at present.**

All in all, only a very small number of banks regard blockchain or distributed ledger technology (DLT) as one of the most important innovative technologies in the coming three years (cf. chart 10). Artificial intelligence (AI) is likewise seldom mentioned in this regard. The banks also see cloud computing and virtual/augmented reality (VR) as only being of secondary importance.

**USE OF INNOVATIVE TECHNOLOGIES**

All banks Chart 10



\* AI: artificial intelligence; VR: virtual reality.  
Source: SNB

**3.3. BANKS' DIGITALISATION STRATEGIES IN THE VARIOUS BUSINESS SEGMENTS**

**Major differences between banks and between business segments with respect to digitalisation targets.**

The banks were also asked about their specific digitalisation measures in the core business segments of mortgages, deposits and payments. It is apparent that the larger banks are seeking to achieve a much higher level of digital maturity than their smaller counterparts.

As regards *mortgage lending to households*, for example, around half of the larger banks are aiming to have process steps almost entirely digitalised, whereas this is rarely the case among smaller banks. In the *deposits business* (including payments), however, both larger and smaller banks are striving to completely digitalise process steps. The targeted level of digitalisation is lowest, comparatively speaking, in *mortgage lending to corporates*.

**Current level of digitalisation well below envisaged targets.**

Overall, the banks have not yet achieved their desired level of digitalisation. In many process steps, digital maturity is well below target.

Digitalisation is currently at its most mature in the process steps involved in initiating a business relationship (cf. charts 11–14, 'Existing'). Chart 11 shows that the larger banks have already digitalised 70% of the application process for mortgage lending to households, for example. Similarly, chart 13 shows that for all banks, around 66% of the application process for a deposit account has been digitalised. Digitalisation is also comparatively high at present in mortgage servicing. For instance, more than 50% of the banks surveyed are already using electronic register mortgage certificates, and a further 20% intend to use electronic mortgage certificates in future.

Overall, digitalisation is most advanced in the payments area (cf. chart 13, 'Payment transactions' and 'Access/information'). For example, most banks have for some time been offering clients the option of accessing accounts and making payments using PCs or mobile devices. However, banks consider it necessary to expand and enhance their existing solutions going forward since new market participants are set to increase competition in this area in particular with user-friendly and low-cost offerings.

Planned digitalisation measures (cf. charts 11–14, ‘Target’) relate on the one hand to the provision and expansion of digital customer interfaces. For example, customers will not only be able to apply for a mortgage digitally, they will also receive an initial response with an offer from the bank in real time (including an approximate interest rate). Furthermore, digitalised advisory services, as well as

digital contract signing options, should be available. Meanwhile, plans for digitalisation also include the automation of processes – for instance, credit checks and the ongoing monitoring of mortgages, or internal booking when opening accounts. However, little progress has been made so far with digitalising these process steps.

### LEVEL OF DIGITALISATION IN MORTGAGE LENDING TO HOUSEHOLDS

Larger banks (share in %)

Chart 11



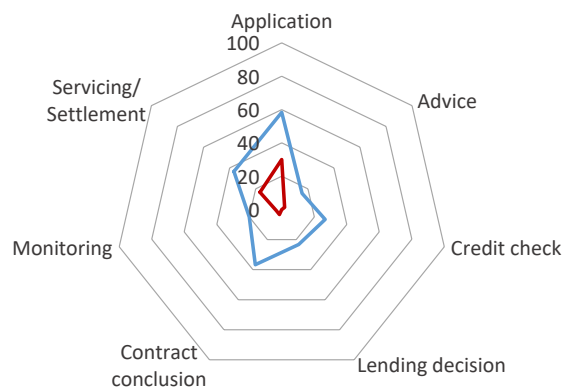
— Target — Existing

Source: SNB

### LEVEL OF DIGITALISATION IN MORTGAGE LENDING TO HOUSEHOLDS

Smaller banks (share in %)

Chart 12



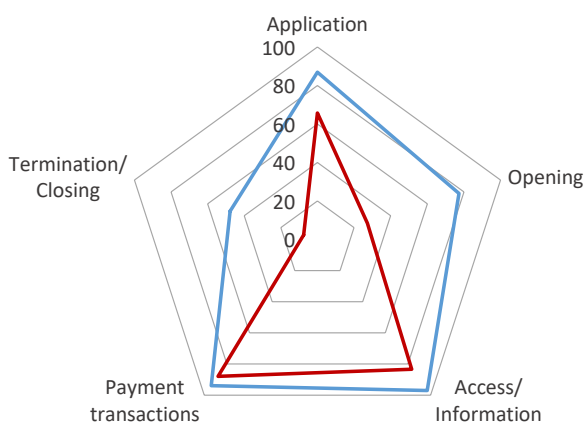
— Target — Existing

Source: SNB

### LEVEL OF DIGITALISATION IN DEPOSITS/PAYMENTS

All banks (share in %)

Chart 13



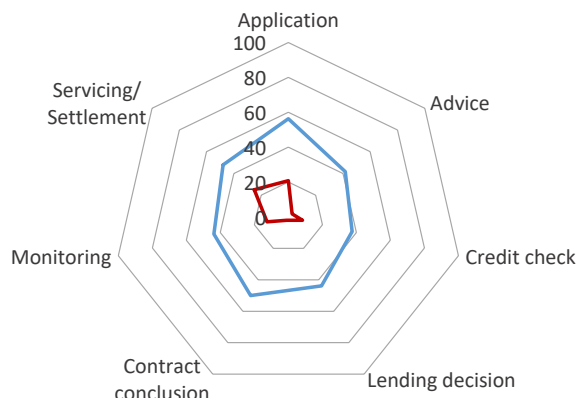
— Target — Existing

Source: SNB

### LEVEL OF DIGITALISATION IN MORTGAGE LENDING TO CORPORATES

All banks (share in %)

Chart 14

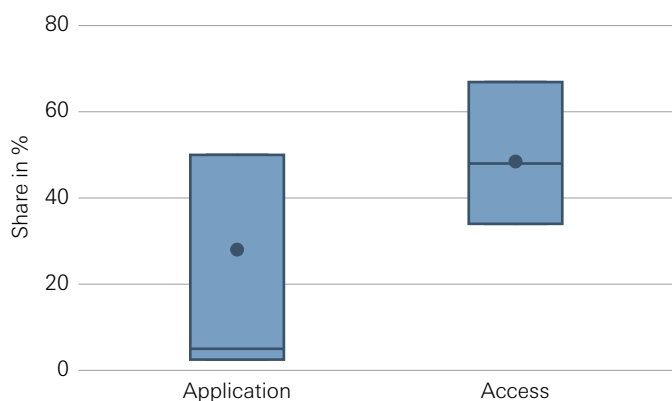


— Target — Existing

Source: SNB

## DEPOSITS/PAYMENTS: USE OF DIGITAL OFFERINGS

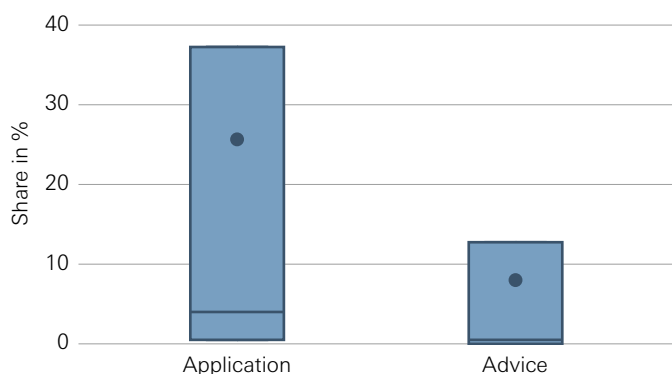
All banks Chart 15



Bounds show 1st quartile, median and 3rd quartile. Marker shows the average.  
Source: SNB

## MORTGAGE LENDING TO HOUSEHOLDS: USE OF DIGITAL OFFERINGS

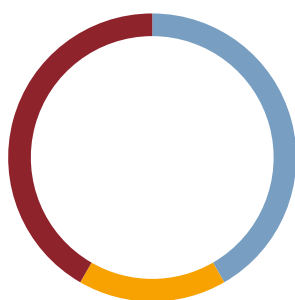
All banks Chart 16



Bounds show 1st quartile, median and 3rd quartile. Marker shows the average.  
Source: SNB

## PROFITABILITY OF DIGITAL SOLUTIONS

All banks Chart 17



- Higher than with traditional solutions **42%**
- Lower than with traditional solutions **17%**
- Same as with traditional solutions **42%**

Source: SNB

## Customer use of digital offerings varies.

The strongest demand is for electronic and mobile banking offerings. According to the survey results, these are used by around half of customers on average across the banks (cf. chart 15, 'Access'). For digital offerings in the mortgage business, banks partially rely on estimates, and assume that demand here is lower. On average, customers use individual digital offerings in around 25% of mortgage applications at a bank, and digitalised support is used in 8% of advisory sessions (cf. chart 16). Banks say that the volumes processed via their own crowdlending platforms are low.

## Principally larger banks interested in digitalised wealth management and investment advice.

As regards digitalised wealth management and investment advice, it was above all larger banks that stated that they already have corresponding solutions for their customers. These are mainly robo-advisory offerings, which are either used to support advisory engagements with customers or to allow customers to seek advice from a robo-advisor online and carry out transactions directly. Larger banks that do not yet offer any digital solutions plan to introduce them in the next two years. A low proportion of the smaller banks already offers digitalised advisory solutions or plans to do so in the future.

Around 40% of banks judge digitalised wealth management solutions to be more profitable than traditional, non-digital approaches (cf. chart 17). Besides profitability, an improved customer experience and the creation of additional customer interfaces are cited as important reasons for introducing digitalised wealth management offerings. Nevertheless, the volume of assets under management digitally is still low. The majority of banks state that these solutions account for less than 5% or even less than 1% of total assets under management (cf. chart 18).

## ASSETS UNDER MANAGEMENT WITH DIGITAL SOLUTIONS

All banks Chart 18



- Less than 1 percent **50%**
- 1 to 5 percent **8%**
- More than 5 percent **42%**

Source: SNB

### 3.4. REGULATION

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**No fundamental need for action on regulation other than with respect to statutory basis for digital ID and digital signatures.**

The majority of banks regard the regulatory regime in Switzerland as sufficient, and do not see it as a hindrance to further digitalisation developments. Banks do see a need for action when it comes to the lack of a legal basis for digital identity and the statutory requirement for contracts to be physically signed for certain transactions. This is seen as an obstacle to end-to-end digitalisation in various business segments.<sup>9</sup>

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<sup>9</sup> Work is under way to remove such obstacles. For example, in mid-2018 Switzerland's Federal Council adopted a dispatch on digital identity (E-ID) for submission to parliament. It has already been approved by the National Council. (<https://www.ejpd.admin.ch/ejpd/de/home/aktuell/news/2018/2018-06-01.html>)

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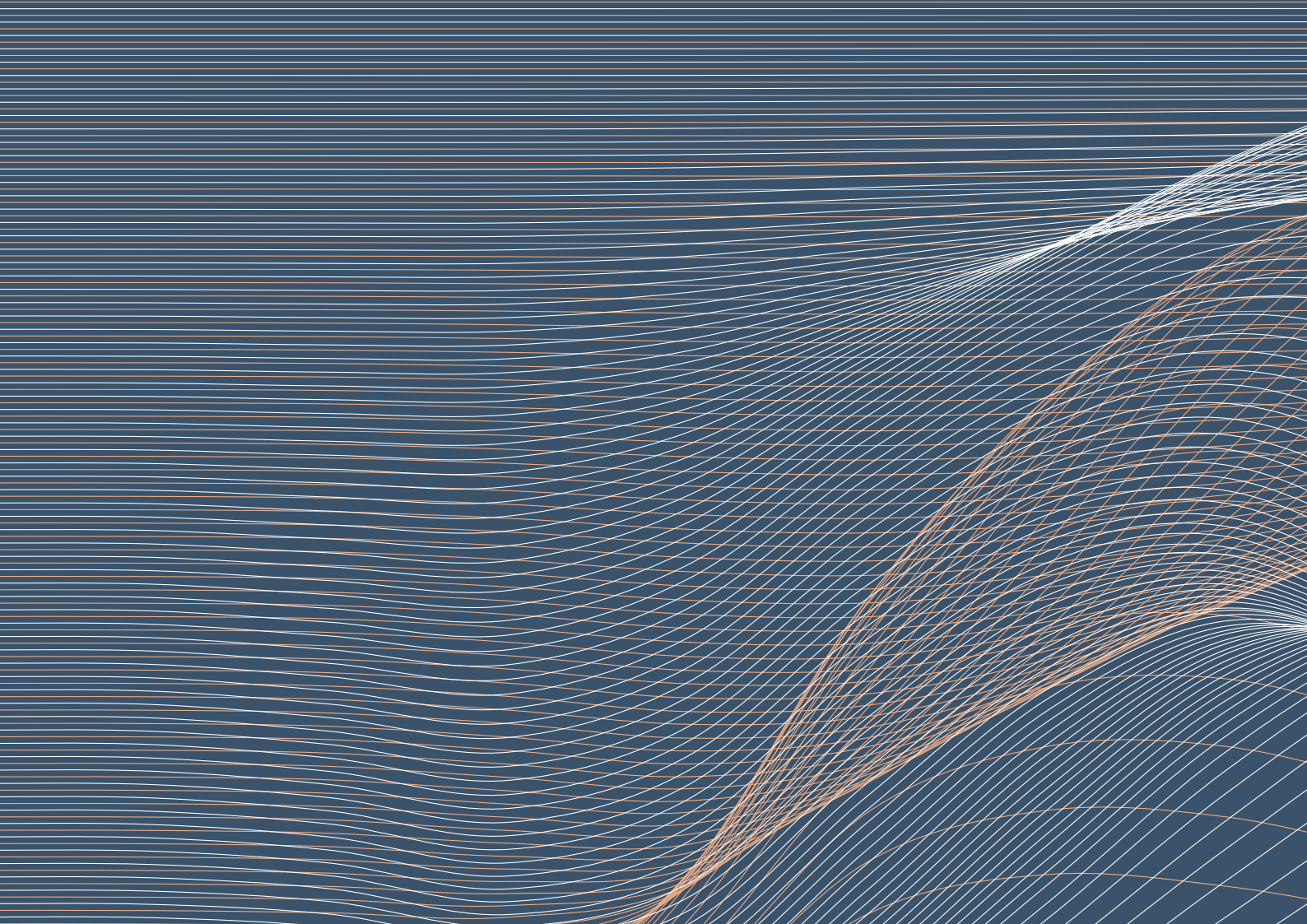
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