

Visa Consulting & Analytics  
Opinion Paper - Open Banking Series

# Going Digital

Is creating a digital challenger bank  
the best way to compete in today's  
digital environment?

**VISA** everywhere  
you want to be



# Digital banking is here to stay

The digital transformation of the banking sector is seemingly unstoppable, and banks face several key challenges now and in the years ahead: how to integrate digital technology into all areas of the bank, how to rethink the way they operate and deliver value, and how to change banking culture, e.g. to become more agile.

Banks must also meet the needs of customers whose benchmark expectations of a digital experience are set by digital behemoths. Technology is enabling bank customers to manage their money safely and more conveniently from their smartphones and desktops. As a result, several digital-only alternatives have sprung up since the mid 2010s to offer a differentiated customer experience to traditional financial services. In some markets, tech savvy users (mainly millennials and Gen Z) have flocked to these services, e.g.: Revolut.



In the 5 years since launch, UK-based **Revolut** has acquired over 15 million international customers<sup>1</sup> who have been lured by the attractive product offering (e.g. zero fee currency exchange) and mobile-only relationship.

*"We're on a mission to build the world's first truly global financial superapp where our customers can manage all of their daily finances.<sup>2</sup> Across our personal and business accounts, we help customers improve their financial health, give them more control, and connect people seamlessly across the world."*<sup>2</sup>

Nik Storonsky, Founder & CEO of Revolut

Furthermore, fintech start-ups have targeted some of the more lucrative segments of the market (e.g. lending or international money transfer). To remain competitive in this environment, many traditional banks are re-looking at how they want to offer digital products and services to their customers. To that end, they are asking themselves a range of important, strategic questions:

- How are our customers' needs changing?
- How do we compete with digital challengers and fintech providers?
- How do we develop our digital channel strategy?
- What are the growth opportunities?
- Do we build on what we already have, or should we create our own challenger bank?
- How should we enter the market?

In this paper, we provide context for these questions, outline strategic imperatives to consider and provide a framework to help banks decide whether creating a standalone digital challenger bank is the best approach.

1. Revolut.com, "One app for all things money", June 2020, <https://www.revolut.com/about-revolut>

2. Revolut.com, "Revolut raises \$500 million in Series D funding as it sets sight on profitability and daily adoption", Feb. 24, 2020, <https://www.revolut.com/en-US/news/revolut-raises-500m-in-series-d-funding>

# Market players are taking different approaches to compete in digital banking

In many markets, technology has democratized financial services, and the race to attract the tech-savvy customer is now being contested between two main groups: **traditional banks and digital native/ fintech start-ups**. These players are using different business models and approaches to win the customer, and each face a different set of commercial and technical challenges to achieving their goals.

## Bank-led approach



### Extend the channel strategy to mobile

Many banks have chosen to develop their mobile banking capability as part of their **multi/omni-channel strategy and digitization roadmap**. Typically, this would be a mobile banking app that provides a digital interface with core bank systems. In the past, these apps offered less functionality compared to internet banking but today, they will include the full product and service offering.

#### *Key challenges:*

- Creating compelling and flexible digital channels built on legacy infrastructure
- Getting the right segmentation between digital and multi-channel customers
- Achieving successful digital engagement with customers



### Create a standalone digital brand

Some banks have decided to create a standalone digital offering (mobile and online) to **compete against digital new entrants**. Banks must decide whether to target specific market segments (e.g. millennials, youth or small businesses) or to go after the whole market.

#### *Key challenges:*

- Minimizing potential for decrease in sales volume due to new product being introduced
- Building a trusted brand
- Acquiring new customers
- Finding the right balance between back-end synergies and dedicated development

## Digital native / fintech approach



### Create a mobile-only bank

These banks are digital natives and, being independent of incumbent players and legacy bank systems, are able to **offer products and experiences that are borne out of the digital era**. Typically founded by entrepreneurs and backed by venture capital investment, these new entrants often start with a limited offering (e.g. payments only) and then build out the roadmap to becoming a full service bank.

#### Key challenges:

- Acquiring customers
- Winning customer account primacy
- Choosing the right product strategy (build, buy or partner)
- Achieving financial sustainability



### Offer specific financial products

Instead of a full service offering, many fintech start-ups have chosen to focus on specific areas. The rationale is simple: **give customers more choice and make it both easier and cheaper for them to buy financial products**. Typically, the fintechs target higher margin segments (e.g. investment services, remittances and lending).

#### Key challenges:

- Acquiring customers and achieving scale
- Finding the optimal business-to-business vs. business-to-consumer strategy approach
- Achieving financial sustainability

## Which approach will prevail?

It is too early to predict which approach will reap the rewards in the long term, but digital banks and fintechs are setting the benchmark for the minimum customer expectations of the future. Traditional banks will need to meet these expectations to remain competitive either by accelerating their digital roadmaps and/or setting up standalone digital operations.

# Why launch a separate digital challenger?

Those banks that have chosen to launch a standalone digital challenger have done so for three main strategic reasons: to defend their market position; to go after new opportunities; or as a vehicle for learning about digital innovation.

Strategic imperative	Examples
<p><b>Defensive play</b></p> <p>In those markets with many new digital entrants, incumbent banks are seeing their customers migrate some or all of their business to the digital banks. Even if they still retain the account, it may only be for commoditized services, e.g. deposits. <b>To compete and retain their customers, banks choose to create their own digital native offering.</b></p>	<p><b>DBS Bank</b> created <b>DigiBank</b> in 2016, a mobile only digital bank (i.e. Branchless), to expand into new markets (such as India).<sup>3</sup></p> 
<p><b>Capture new segments</b></p> <p>Proactive banks will look to retain customers and will seek to utilize digital capabilities to win new business. These banks are looking to <b>attract new market segments that are underserved by their core offering</b>, e.g. youth, mass affluent or small business.</p>	<p><b>Emirates NBD (UAE)</b> launched <b>Liv.</b> in 2017, a lifestyle-orientated and mobile bank, to offer a differentiated digital experience to millennials and a new generation of customers.<sup>4</sup></p> 
<p><b>Test &amp; learn</b></p> <p>Some banks are <b>using their standalone operations to test innovation</b>. In this environment, unhindered by parent bank processes and systems, it is quicker to test, learn about and launch new digital services. These learnings are invaluable when the propositions are subsequently integrated into the main bank.</p>	<p><b>BBVA (Spain)</b> is a traditional bank that is heavily investing in and focusing on innovation, e.g. invested in digital banks <b>Simple</b><sup>5</sup> (US) and <b>Atom Bank</b><sup>6</sup> (UK) to drive innovation within the parent bank.</p> 

3. DBS.com, "DBS breaks new ground in digital banking", 2016, [https://www.dbs.com/newsroom/DBS\\_breaks\\_new\\_ground\\_in\\_digital\\_banking](https://www.dbs.com/newsroom/DBS_breaks_new_ground_in_digital_banking)

4. EmiratesNBD.Com, "Emirates NBD launches Liv. digital banking proposition", 2017. [https://www.emiratesnbd.com/en/media-centre/media-centre-info/?mclid\\_en=409](https://www.emiratesnbd.com/en/media-centre/media-centre-info/?mclid_en=409)

5. BBVA.com, "BBVA acquires Simple to accelerate digital banking expansion", 2018 <https://www.bbva.com/en/bbva-acquires-simple-to-accelerate-digital-banking-expansion/>

6. BBVA.com. "BBVA invests in Atom Bank, the UK's first mobile-only bank", 2018, <https://www.bbva.com/en/bbva-invests-in-atom-bank-the-uks-first-mobile-only-bank/>

# What can we learn from banks who have started the journey?

## Banks are targeting their customers

Although there are some digital banks aimed at the mass market, it is unsurprising that significant focus has been on tech-savvy consumers. Other propositions, however, have emerged to serve specific market segments that are also attracted to a simpler, digital experience or lower fees, e.g. youth and small businesses.

- **Spain's CaixaBank** created a separate entity, **Imagin**, in 2016. This mobile-only bank uses social media (Facebook, Twitter etc.) to connect with the young adult segment.<sup>7</sup>
- **UK's RBS** launched **Mettle** in 2018 to offer digital banking services to small business customers offering a range of business management capabilities and zero fees.<sup>8</sup>
- **HSBC** developed **PayMe**, a standalone e-wallet and P2P payments app targeted to digital-savvy teens. Users do not need to be a HSBC customer to use PayMe. They can simply register with their mobile number and a valid HK Identity Card.<sup>9</sup>

## Having a full banking license isn't a prerequisite

Acquiring a full banking license may be the end goal for digital banks but there are potentially many regulatory and compliance hurdles to overcome to obtain one. Alternatively, banks might use an e-money or digital banking license that allows a restricted range of financial services (e.g. payments but not lending) or use an extended license from the parent bank.

- **UK's RBS** used a license extension for **Bó**, its consumer offering, (which was shuttered after six months), and an e-money license for **Mettle**, its business proposition.<sup>10</sup>
- **86400**, an Australian challenger banks (acquired by NAB in January 2021), was granted an authorized deposit-taking institution (ADI) license by Australian Prudential Regulation Authority (APRA). Having met the necessary regulatory requirements, 86400 is allowed to launch savings and transactions account, and take deposits from customers.<sup>11</sup>
- **ZA Bank** was granted an insurance agency license to be the first digital-only issuer to offer insurance products. ZA Insure aims to offer simple insurance products at affordable prices to cater to their customers' diverse needs for basic protection.<sup>12</sup>

7. CaixaBank.com, "ImaginBank, Spain's first mobile-only bank for millennials", 2016, [https://www.caixabank.com/comunicacion/noticia/imaginbank-spain-s-first-mobile-only-bank-for-millennials--1775-c-23497--\\_en.html?id=23497](https://www.caixabank.com/comunicacion/noticia/imaginbank-spain-s-first-mobile-only-bank-for-millennials--1775-c-23497--_en.html?id=23497)

8. RBS.com, "NatWest launches innovative digital proposition for SMEs", 2018, [https://www.rbs.com/rbs/news/2018/11/natwest-launches-innovative-digital-proposition-for-smes.html?q=mettle&brand=NATWESTGROUP\\_COM&section=natwestgroup&enginekey=KMC4iXzhoghqGWug1xWC&stq=mettle&stp=1](https://www.rbs.com/rbs/news/2018/11/natwest-launches-innovative-digital-proposition-for-smes.html?q=mettle&brand=NATWESTGROUP_COM&section=natwestgroup&enginekey=KMC4iXzhoghqGWug1xWC&stq=mettle&stp=1)

9. Finextra.com, "HSBC targets teens with PayMe wallet app", May 13, 2020, <https://www.finextra.com/newsarticle/35815/hsbc-targets-teens-with-payme-wallet-app>

10. Finextra.com, "NatWest launches digital challenger Bó", 2019, <https://www.finextra.com/newsarticle/34850/natwest-launches-digital-challenger-b>

11. ZDNet.com, "APRA grants Aussie fintech 86 400 a banking licence", July 18, 2019, <https://www.zdnet.com/article/apra-grants-aussie-fintech-86-400-with-banking-licence/>

12. Insurance Business Asia. "Hong Kong's ZA Bank enters insurance business", Jan 27, 2021, <https://www.insurancebusinessmag.com/asia/news/breaking-news/hong-kongs-za-bank-entersinsurance-business-244634.aspx>

## Banks are already going digital

Several banks have already started down the digital journey ranging from full service digital banks to segmented, differentiated offerings.

- **Ukraine's Universal Bank** launched **monobank**, the first mobile-only bank in Ukraine, in 2017. Monobank is aimed at millennials and offers credit cards, loans and deposits.<sup>13</sup>
- **KSA's Gulf International Bank** launched **Meem** in 2015, the first Islamic digital banking offering to be launched in the region.<sup>14</sup>
- **FRANK by OCBC Bank** rolled out a sub-brand that was designed for Singapore's youth and young working adults. Appealing to the millennials, FRANK offers attractive card designs and financial health tools.<sup>15</sup>
- **Bank of America's** 'Business Advantage 360' is a one-stop digital dashboard for business owners. With this feature, business owners can conveniently manage and track cash flow, and connect other business apps for a comprehensive overview of performance.<sup>16</sup>

## Success is by no means guaranteed

Launching an independent digital offering is a risky venture that may fail for a variety of reasons, e.g. choosing the wrong business model, lack of differentiation or misjudging the customer's willingness to change or pay for services. Even with the resources to invest and financial services know-how, many traditional banks have experienced mixed success when launching or acquiring digital banks. Nonetheless, it is critical that **banks use any failures as an opportunity to learn and refocus their digital efforts.**

- **UAE's Commercial Bank of Dubai** launched **CBD Now** in 2017, targeting millennials and digitally savvy customers. The digital only proposition was merged back into the parent bank a year later.<sup>17</sup>
- **UK's RBS** launched mobile-only bank, **Bó**, in 2019 to respond to new players such as Monzo and Revolut. After only six months, the operation was shuttered due to limited customer uptake, thus highlighting the difficulty of creating a new, differentiated consumer brand in digital banking.<sup>18</sup>
- **Xinja Bank** found it increasing difficult to raise capital resulting from the global pandemic. Consequently, the Australian challenger bank withdrew their authorized deposit-banking institution (ADI) license granted to them in 2018.<sup>19</sup>

13. Payscalemagazine.com, "Monobank: innovative Ukrainian neobank and its unique features", 2020, <https://payscalemagazine.com/banks/monobank-innovative-ukrainian-neobank-and-its-unique-features/>

14. GIB.com, "GIB launches trial phase of retail banking services in the Saudi market, 'meem' introduces first of a kind services with an innovative approach", 2015, <https://www.gib.com/en/gib-launches-trial-phase-retail-banking-services-saudi-market-'meem'-introduces-first-kind-services>

15. Hiredigital.com, "How Being FRANK Won Millennials Over", Nov. 13, 2019, <https://hiredigital.com/blog/frank-by-ocbc-building-millennial-trust>

16. Businesswire.com, "Bank of America Business Advantage 360 Gives Small Businesses the Ability to View Data From Third-Party Business Applications in Award-Winning Digital Dashboard", Feb. 6, 2020, <https://www.businesswire.com/news/home/20200206005307/en/Bank-of-America-Business-Advantage-360-Gives-Small-Businesses-the-Ability-to-View-Data-From-Third-Party-Business-Applications-in-Award-Winning-Digital-Dashboard>

17. "FinTechFutures.com, "Challenger banks in the Middle East", 2020, <https://www.fintechfutures.com/2019/12/challenger-banks-in-the-middle-east/>

18. FinTechFutures.com, "RBS closes digital bank Bó six months after launch", 2020, <https://www.fintechfutures.com/2020/05/rbs-closes-digital-bank-bo-six-months-after-launch/#:~:text=RBS%20closes%20digital%20bank%20B%C3%B3%20six%20months%20after,a%20customer-facing%20brand%E2%80%9D%20in%20its%20Q1%202020%20results.>

19. Reuters.com, "Australia's Xinja Bank to give up banking license, return deposits", Dec. 16, 2020, <https://www.reuters.com/article/xinja-bank-australia-idUSL1N2IV2WB>

# Is launching a digital bank the answer?

Given the increasing competition from fintechs, growing customer expectations and level of peer activity, it might be compelling for banks to set up a new digital bank brand. However, this might not necessarily be the best response. To help banks decide, they should consider a two-step approach and answer some key, strategic questions:

1. *Should we launch a challenger bank? Is this the best option to meet our objectives?*
  2. *If so, how do we do it? What are the options, what is the operational design and how do we execute?*
- 

## 1) Deciding whether to launch

It is a major undertaking to launch a new digital bank and must be considered in the context of a bank's own digital roadmap. Banks should invest time to understand their specific market circumstances and to determine if there are strategic imperatives to setting up a digital bank (i.e. defensive play, capture new segments or test & learn). These learnings will inform the decision-making process. For example:

- If customers are switching accounts because of more attractive offerings elsewhere, **banks might choose to enhance their current offering through digital channels rather than create a separate entity**. This is a more likely option if back-end infrastructure and IT systems aren't hindering a bank's ability to meet market needs or there are few new entrants in the market.
- Although banks may have identified clear target segments where customer needs aren't being met, **they might choose to create bespoke solutions based on existing products and channels rather than invest in a new standalone offering**. This may be more likely if there is a higher risk of decreased sales as a result of a new product being introduced by the same bank or if the target segment isn't stable across the customer life cycle.
- If banks want a new testing ground for innovative digital solutions, **they might expand and accelerate their existing digital roadmaps rather than set up a discrete operation**. This may be more likely if banks look to de-risk success in other ways, e.g. innovation development operates independently but is closely aligned to the bank's digital transformation strategy.





The high-level decision tree presented below offers preliminary guidance to support a “Go” or “No go” decision for each of the three strategic imperatives. Beyond these thought starters, in-depth analysis and validation are essential and, whichever decision is reached, it doesn’t exclude the need for continuous investment in existing platforms.



## 2) Planning and implementing the route to market

Once a “go” decision has been reached, banks will need to:

- (a) weigh the wider operational considerations
- (b) choose how to enter the market
- (c) develop an implementation roadmap

For example, while it may be desirable to create a separate entity from scratch, it might be quicker and more cost effective to adapt existing solutions once operational dependencies and implementation are taken into account. Depending on the situation it may be optimal for banks to subscribe to proven, white label capability instead or, assuming the right synergies exist, the simplest option might be to buy an existing digital bank.

### (a) Wider operational considerations

To fully understand the impact of launching a digital challenger, it is important that banks deliberate on the broader organizational perspective and impacts. This will inform some of the critical decisions around execution.



#### Organizational structure

Banks will need to decide on the organizational structure and governance of the new proposition, whether it operates within the main parent bank or as a separate entity with its own management structure and decision making.

Depending on the market, the type of regulatory license the digital bank uses will determine the range of services it can offer. An extension of the parent bank’s license may enable full service capability whereas an e-money or digital license may be easier to obtain but may restrict the offering, e.g. no lending.



#### Operational dependency

The level of operational dependency that the new proposition has from the parent bank will affect how quickly or well it can execute. Tying the challenger closely to the parent offers synergies and optimizes integration. However, as a standalone entity, with separate operational and resourcing channels, the challenger is more agile and is unhindered by parent bank processes and systems.



#### Time to market

Speed to market is always important. However, in a competitive environment with many digital offerings, a traditional bank may prioritize agility, and this will influence the pathway it chooses to launch. Conversely if the bank is already the market leader in digital, there may be more time to pursue other options.

## (b) Banks have options on how to enter the market

Banks will need to decide how they plan to implement the new proposition and how they will use existing assets and products. There are main four pathways to building a digital challenger: adapting an existing solution, building from scratch, using a white label platform, or through acquisition. These pathways are not mutually exclusive, and each come with different benefits and disadvantages that must be assessed carefully since they will vary depending on individual bank circumstances (e.g. market requirement or current level of bank infrastructure).

Pathway	Benefits 	Disadvantages 
 <p>Adapt existing solution</p>	<ul style="list-style-type: none"> <li>• Typically, shorter time to market</li> <li>• Ownership of technology assets</li> <li>• Greater control over the development process</li> <li>• Less reliance on third parties</li> </ul>	<ul style="list-style-type: none"> <li>• Cost and time, if existing platform requires significant enhancement</li> <li>• Ability to differentiate the product offering and customer experience may be restricted by legacy systems</li> <li>• Additional resource requirements</li> </ul>
 <p>Build from scratch</p>	<ul style="list-style-type: none"> <li>• Ownership of technology assets</li> <li>• Greater control over the development process</li> <li>• Less reliance on third parties</li> </ul>	<ul style="list-style-type: none"> <li>• Longer time to market</li> <li>• Significant resource requirements for human capital with specialized, digital skillsets</li> </ul>
 <p>White label platform</p>	<ul style="list-style-type: none"> <li>• Banking as a Service (Baas), a remote provision of banking capability to third parties, typically through API platforms</li> <li>• Immediate access to new functionality and software upgrades</li> <li>• Lower initial investment</li> </ul>	<ul style="list-style-type: none"> <li>• Limited differentiation from competitors</li> <li>• Single vendor dependency risk</li> <li>• Third party reliability and risk (e.g. data, operational and financial risk)</li> <li>• Total cost of ownership might be greater as the operation scales</li> </ul>
 <p>Acquisition</p>	<ul style="list-style-type: none"> <li>• Ownership of technology assets that are already established</li> <li>• Greater control over the development process</li> <li>• Opportunity to integrate innovation into parent bank</li> </ul>	<ul style="list-style-type: none"> <li>• Merger and acquisition process could be lengthy (typically &gt;six months)</li> <li>• Cost (target may be overpriced)</li> <li>• Write-off risk (target does not realize value potential)</li> <li>• Integration challenges (e.g. organizational structure, brand, customer experience)</li> </ul>

### (c) An implementation roadmap is critical to success

Whichever pathway is chosen, the bank will need expertise, guidance and support from trusted partners, none more so than for the implementation roadmap that will frame how a digital bank is created and launched. We believe there are three core phases to a robust implementation roadmap:

(1) business model definition, (2) solution design and (3) implementation.

#### Implementation Roadmap: key activities required for digital bank set-up

##### Phase 1: **Business model definition**

The first step is a thorough and comprehensive review of the existing approach and capabilities that will enable the bank to decide on the optimal way to target specific market segments.

- **Diagnostic of existing strategy**, e.g. target segment analysis, competitive dynamic, operational set up.
- **Diagnostic of existing proposition**, e.g. functionality, IT capability assessment, user experience/feedback.

##### Phase 2: **Solution design**

The next step involves the alignment of the desired customer value proposition (CVP) and user experience (UX) with the operational and commercial requirements to deliver them.

- **CVP design**, e.g. product suite, key features and service model.
- **UX design**, e.g. customer journeys, mobile functionality, user interface development.
- **Operational model**, e.g. organizational structure, operational dependencies.
- **Business case**, e.g. capital expenditure requirements, profit & loss projections, key performance indicators, resourcing.

##### Phase 3: **Implementation**

The final phase brings together assets and capabilities to deliver the customer value proposition through the mobile app and prepares for launch.

- **CVP implementation**, e.g. sourcing of benefits, service journeys, channel coverage.
- **Mobile app implementation**, e.g. front-end development, branding.
- **Operationalization**, e.g. IT requirements, back end processes, compliance.
- **Launch & engagement plan**, e.g. marketing materials, engagement initiatives.



## Visa can support banks on their digital journey

Technology has given customers more freedom when choosing financial products and services and they are attracted to providers that enable them to manage their money safely and more conveniently from their smartphones and desktops. Banks are finding that they must reimagine their customer experiences to continue to remain relevant in today's market.

To be successful and to differentiate from the competition, you may choose to develop your mobile banking capability as part of your multi/omni-channel strategy and digitization roadmap. In addition, you may also decide to create your own standalone digital bank to defend your position in the market, to go after new business or to use as a test and learn for your digital innovations.

### Why Visa?

Visa is the world's leading digital payments company and we have extensive experience of working with banks to bring end-to-end digital solutions to market. Whatever your strategic rationale for setting up a digital operation, Visa can help you to decide on the best approach and to support you, from business model design through to solution design and implementation.

Working in partnership with Visa Consulting & Analytics, you can benefit from Visa's digital know-how and technology assets to help you realize your digital ambitions:

- Our Visa Consulting & Analytics Digital Service Line can drive strategic and operational guidance in the design, set up and execution to achieve the full potential of your offering.
  - This could include:**
    - Strategy definition
    - Customer value proposition development for the target segment
    - Mobile banking features and functionalities identification
    - App UI/UX design and prototyping
    - Digital bank operational model and financial planning
- Visa has digital capabilities and physical products (payment cards) to power your solutions and offer maximum flexibility to your customers
- Our Visa Developer Platform provides convenient and immediate access to a range of APIs that can be used for digital product development
- Visa's Innovation Centers employ human-centered design principles to re-imagine your customer journeys
- Through Visa's international network of innovation partners and digital enablers, we can facilitate digital partnerships and connect banks to the fintech community
- Visa can provide marketing expertise to support the design, execution and brand campaigns

# About Visa Consulting & Analytics

We are a global team of hundreds of payments consultants, data scientists and economists across six continents:

- Our consultants are experts in strategy, product portfolio management, risk, digital and more, with decades of experience in the payments industry.
- Our data scientists are experts in statistics, advanced analytics and machine learning, with exclusive access to insights from VisaNet, one of the largest payment networks in the world.

- Our economists understand economic conditions impacting consumer spending and provide unique and timely insights into global spending trends.

---

The combination of our deep payments consulting expertise, our economic intelligence and our breadth of data, allows us to identify actionable insights and recommendations that drive better business decisions.

---



For more information, please contact your Visa Account Executive or email Visa Consulting & Analytics at [VCA@Visa.com](mailto:VCA@Visa.com).

You can visit us at [Visa.com](https://www.visa.com) or on [YouTube](https://www.youtube.com/watch?v=t5NNnOY78Ls) at <https://www.youtube.com/watch?v=t5NNnOY78Ls>. You also might want to take a look at: [VCA Opinion Paper: How contactless is reinventing the way people pay](#)

**Visa Consulting & Analytics** is a global team of industry experts in strategy, marketing, operations, risk and economics consulting, with decades of experience in the payments industry. Using analytics from the payment network with the most purchase transactions worldwide, our team of subject matter experts can provide you with proven strategies and data-driven insights that support your business objectives.

The terms described in this material are provided for discussion purposes only and are non-binding on Visa. Terms and any proposed commitments or obligations are subject to and contingent upon the parties' negotiation and execution of a written and binding definitive agreement. Visa reserves the right to negotiate all provisions of any such definitive agreements, including terms and conditions that may be ordinarily included in contracts. Case studies, comparisons, statistics, research and recommendations are provided "AS IS" and intended for informational purposes only and should not be relied upon for operational, marketing, legal, technical, tax, financial or other advice. Visa Inc. neither makes any warranty or representation as to the completeness or accuracy of the information within this document, nor assumes any liability or responsibility that may result from reliance on such information. The Information contained herein is not intended as investment or legal advice, and readers are encouraged to seek the advice of a competent professional where such advice is required. When implementing any new strategy or practice, you should consult with your legal counsel to determine what laws and regulations may apply to your specific circumstances. The actual costs, savings and benefits of any recommendations, programs or "best practices" may vary based upon your specific business needs and program requirements. By their nature, recommendations are not guarantees of future performance or results and are subject to risks, uncertainties and assumptions that are difficult to predict or quantify. All brand names, logos and/or trademarks are the property of their respective owners, are used for identification purposes only, and do not necessarily imply product endorsement or affiliation with Visa.