Fintechs & the Future
Bottom Lined
…and why what you’ve heard is wrong

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Hacking the hyperbole...
From the Latin: 

*hyper* (extreme), *bol* (bull), *e* (excrement)
From the Lee sense of the word:

To deconstruct conventional wisdom with data and a playful yet wickedly righteous sense of duty and purpose
Why are we so vulnerable to hyperbole?
1. Uncertainty about the future
2. Narrative bias
3. Attentional bias
Does stress cause ulcers?
Does eating fat make you fat?
Strategy requires foresight...
...but it’s hard to see ahead with built-in blind spots.
Think  See  Do
“Fintechs are disrupting banks.”
"60% of fintech funding (in North America) now backs collaborative fintechs vs. disruptive fintechs." -- Celent
Lending & Payments Fintechs Receive Most Funding

Lending and Payments start-ups continue to receive strongest funding.

Source: Venture Scanner, 3Q 2016

<table>
<thead>
<tr>
<th>Category</th>
<th>VC Funding (B)</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Lending</td>
<td>$13.6</td>
<td>233</td>
</tr>
<tr>
<td>Payments Backend</td>
<td>$9.2</td>
<td>~135</td>
</tr>
<tr>
<td>Personal Finance</td>
<td>$2.0</td>
<td>170</td>
</tr>
</tbody>
</table>

Source: Venture Scanner, 3Q 2016
In Q3 2017, US VC-backed fintech startups raised $1.9 BILLION across 111 DEALS.
In Q3’17, deals to US VC-backed fintech companies rose 11%, recovering after 2 consecutive quarterly dips.

Funding hit $1.9B, driven by 10 $50M+ financing rounds, including deals to small business lender Kabbage and newly-minted unicorn Coinbase.
US annual global financing trend to VC-backed fintech companies ($B)
2012 – 2017 YTD (Q3’17)

At the current run rate, deals to US VC-backed fintech companies are set to fall below 2014’s total, but US fintech funding in 2017 could surpass 2016’s year-end total of $5.7B.
“50% of banks...[will] give up their existence to a range of FinTech providers and tech companies.” –Brett King
Why Brett is wrong…

1. The “augmented” future of banking still requires device-independent value stores (bank accounts).

2. Banks will retain (even in Brett’s forecast) the biggest value stores (accounts).

3. Information about these value stores (balances, transactions, etc.) will be the differentiating context required for enriched real-time payments experiences.

4. Banks will leverage and monetize their valuable data with fintechs by turning APIs into products of their own.

5. Banks (and other financial institutions) will own faster and real-time payment rails in the U.S.
“Brett King once hoped his company, Moven, would become “the Facebook of banking.” Today, he is selling his software to the banks he once scorned.”

“We are explicitly not a threat to the banks...from our perspective the banks and card networks have built something pretty good and pretty hard to replicate.”

--Tim Drinan, Stripe
Fintechs are partnering with banks.
Shifting Mindset
Shifting Mindset: View of Technology

- Tech no longer viewed primarily as means of cost cutting and efficiency
- Now viewed as strategic differentiator and enabler of better UX and speed to market with new capabilities
Shifting Mindset: Partner/Disclose Fintech Partnerships

- From build-your-own and keeping tech partners hidden to...
- ...open, public alignment with fintechs heralded with joint press releases
- And increased bank investment in fintechs

SOURCE: "Large Banks and Technology Buying: An Evolving Mindset"; Aite Group; July 2017
Big Banks Join Forces To Vet FinTech Partners

By PYMNTS

Posted on November 15, 2017
“Banks should fear fintechs.”
Banks should fear other banks that strategically leverage fintechs to differentiate.
Banks should fear Amazon.
We all should, really.
Scan an item. It’s in your cart.

amazon dash WAND
NOW WITH ALEXA

Say it. Scan it. Ask Alexa.
Amazon has a patent to keep you from comparison-shopping while you're in its stores

Brian Fung, The Washington Post  Published 8:25 am, Friday, June 16, 2017

Amazon to buy Whole Foods Market in deal valued at $13.7 billion
Amazon Go store leverages sensors, machine learning, and AI to allow customers to walk in and walk out without going through a checkout line.
Apple Pay. Pay friends with a message.

iOS 11 brings the convenience of Apple Pay to Messages. Now sending money to friends — and receiving it — is as simple as a conversation.

**Person to Person**  Apple Pay Cash

Use Apple Pay with your credit or debit card to send money instantly and securely, right in Messages. You can request and receive money just as easily.³
Apple Pay. Pay friends with a message.

“Once a P2P payment is sent, the cash balance will be stored on the Apple Pay virtual card in the Wallet App. That means users have instant access to the cash instead of waiting for it to clear in a traditional bank account.” – www.pymnts.com

Person to Person  Apple Pay Cash

When you get paid, your money is securely kept in Apple Pay Cash and instantly available for you to send to someone or spend with Apple Pay in stores, in apps, and on the web, or transfer to your bank account.³
Banks should leverage fintechs to fend off bigtechs.
“Payments are getting faster.”
Most popular mobile P2P provider today?
How fast is a Venmo P2P payment today?
It’s a total crapshoot.

Transferring money from your Venmo balance to your bank account usually takes 1–2 business days but it varies depending on your bank. Usually if you have a major bank, your money is transferred into your account the next day. However, some smaller banks may take longer and it may happen faster on others.
Payments are getting slower for the average cardholder.
Average EMV dip-and-stay transaction takes 10 seconds.
Average human attention span shortened from 12 seconds in 2000 to 8 seconds in 2015.

Average goldfish attention span averages 9 seconds.
My Apple Pay experience at Whole Foods... with my community bank’s debit card.
False Declines > Actual Fraud

U.S. issuers *falsely declined* $264B in card transactions in 2016:
16X actual fraud of $16B

Javelin Strategy & Research & Aite Group
False Decline Impact in the U.S.

U.S. False Decline Impact 2015 to e2018 (In US$ billions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Impact (in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$235</td>
</tr>
<tr>
<td>2016</td>
<td>$264</td>
</tr>
<tr>
<td>e2017</td>
<td>$303</td>
</tr>
<tr>
<td>e2018</td>
<td>$331</td>
</tr>
</tbody>
</table>

Source: Alte Group
Payments are disappearing.
B.O.L.P.U.I.S.
M.O.A.P.
RTP

The Clearing House®
Real-time Payments
“Faster payments are only about making payments faster.”
Real-time Payments Mean Real-time Everything

- Instant loans
  - Real-time funding must be preceded by instant decisioning
- Instant onboarding (account opening/funding)
  - Real-time verification of account ownership via test credit/debit
- Dynamic lending
  - Persistent underwriting
- Real-time fraud monitoring and control
  - No time for manual review and handling
- Real-time analytics
  - Dynamic segmentation by behavior
Faster payments are about the reengineering of most bank products and services.
“Alexa, ask my bank to pay my gas bill.”
“Get a chatbot right now.”
Messaging & Finance Apps Pave Way for Chatbots

Mobile App Usage Year Over Year, 2015-2016

SOURCE: Flurry Analytics, 2016-2016 Year-Over-Year Session Growth
Most chatbots not ready for prime time.
RE-PRE-SEN-TA-TIVE!!!
We are in the “Uncanny Valley”.

"Uncanny Valley"
“Human replicas which appear almost, but not exactly, like real human beings elicit feelings of eeriness and revulsion (or uncanniness) among some observers (listeners).”
How Alexa sucks...
Alexa, I need hair gel.

I’ll add it to your shopping list.

Alexa, I want hair gel now.

I’ll add it to your shopping list.

Alexa, BUY HAIR GEL!!!

Ok. It should arrive tomorrow.
When chatbots work...
“Please find all transactions around four dollars in my checking”

I couldn’t find an exact match, but I did find 5 posted transactions that are close to what you’re looking for. Here they are:

- ATM Fee
  Tuesday December 17 2013
  -$3.95

- ATM Fee
  Monday December 9 2013
  -$3.95

- ATM Fee
  Tuesday December 3 2013
  -$3.95

- ATM Fee
  Monday November 2
  -$3.95
How much did I pay Jake Zamrak last month?

Nothing came up.

Please pay Jake Zamrak $150 for guitar lesson

Let’s confirm. You’d like to send Jake Zamrak $150, right?
Meet Penny, your personal finance coach.

Good things happen when you chat with Penny: spend smarter, save more, live happier.

Download on the App Store
GET IT ON Google play

A chat-based personal finance coach.
Know everything about your money with Penny.

Penny sends you beautiful tailored charts and insights to help you know how you’re spending in real time. Avoid overdrafts and “where did my money go?” damage control.

“Here’s how your July is looking...”
Partnerships vs. Platforms
Aggregation vs. APIs (Direct Data Feeds)

- Password sharing with aggregation increases risks.
  - SEE massive password breaches at LinkedIn and Yahoo
- Aggregation’s reliance on online-banking-password sharing deters mass adoption and usage.
- Screen scraping undermines fraud controls and is easily disrupted (bad UX).
- API direct data feeds are more secure and reliable, but they require more investment and cooperation.
  - APIs are more difficult to achieve, and therefore present a disproportionate challenge to smaller banks.

## API Banking Models: Steps Toward Open Banking?

### Internal Bank Channel
- Use APIs internally as a channel for own bank products
- Faster development; better UX
- Many banks using this model as part of digital strategy

### App Market
- Expose bank services through open APIs to third-party developers
- **Bank charges for API calls or shares revenue if third party brings clients**
- Examples: BBVA, Capital One

### Distributor
- Integrate/bundle external financial services with own offerings
- Deliver best-in-class products with partners
- Revenue share from service providers and new customers
- Example: N26

### Aggregator
- Aggregate multiple APIs from financial service providers into a single API
- Multi-bank offering; standard solution for TPPs
- Examples: Figo, nonbank PFMs (Yodlee, Strands, Treefin)

### Banking-as-a-Platform
- Offer open banking platform including APIs to other FIs
- Accelerates digital strategy
- License maintenance fees, revenue share
- Example: Fidor, CBW/Yantra, Open Banking Platform

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**SOURCE:** Aite Group’s “The Programmable Bank: How Banks Can Deploy and Monetize Open APIs; by Ron van Wezel; November 2016
Internal Bank Channel

- Banking services are exposed through private APIs to customer-facing applications, such as mobile banking.
- Bank’s services are made available through the API to the bank’s own apps with a single, integrated UX

SOURCE: Aite Group’s “The Programmable Bank: How Banks Can Deploy and Monetize Open APIs; by Ron van Wezel; November 2016
## Getting Paid: Monetizing APIs

<table>
<thead>
<tr>
<th>Category</th>
<th>Revenue source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developer pays</td>
<td>Direct, such as pay as you go (e.g., Amazon Web Services); tiered pricing; or per transaction (e.g., PayPal, Stripe)</td>
</tr>
<tr>
<td>Developer gets paid</td>
<td>Developer brings new business, or referral deals</td>
</tr>
<tr>
<td>Indirect</td>
<td>Content acquisition (e.g., Facebook, eBay, Twitter) or upsell to premium plan (e.g., Salesforce)</td>
</tr>
</tbody>
</table>

*Source: John Musser (API Science), Aite Group*
The “Platformification” of Banking (Ron Shevlin)

• Platform
  • “A plug-and-play business model that allows multiple participants (producers and consumers) to connect to it, interact with each other, and create and exchange value.”

• Successful platforms attract both producers and consumers, match producers with consumers, and provide seamless integration among participants.

• Platform Service Providers (PSPs)
Platform Service Providers: Lending

Kabbage

LendKey

AKOUBA
Platforms: Onboarding & Account Opening

- Identity Management & Authentication
- Form Pre-Fill & Imaging
- Electronic Signatures
- Verification & Decisioning Services
- Address Validation
- Core Banking Systems
- Marketing Automation & Communication Platforms
API Hubs/Platforms

SOURCE: Aite Group’s “The Programmable Bank: How Banks Can Deploy and Monetize Open APIs; by Ron van Wezel; November 2016
How the Future Works
The Future of Banking? More Complexity

Scenario 1
The Better Bank
Legacy Banking Platform → Digital Banking Interface

Scenario 2
The New Bank
Built-for-Digital Banking Platform

Scenario 3
The Distributed Bank
FinTech Providers → Banking Services Aggregator

Scenario 4
The Disintermediated Bank
Banking Platform → Social Network Banking Interface

Customers
Co-Innovation & Probability of Success

Co-Innovation & One Weak Link

Fintech Forge

trabian

BECOME LABS
WE HELP FINANCIAL INSTITUTIONS CREATE VALUE IN THIS ERA OF DIGITAL DISRUPTION
Plug and play financial services platform.

The banking experience of the future. Intelligent, automated and unique to every individual.

Join the beta
The Future of Fintegration: Bottom Line

• Fintech’s greatest challenge for banks is not disruption or disintermediation but complexity of opportunity.

• That complexity will be disproportionate for smaller banks, giving rise to a new class of Platform Service Providers that simplify, standardize, and secure, one-to-many API connections to fintechs of choice.

• Banks shouldn’t fear fintechs. Banks should fear other banks that leverage fintechs to differentiate strategically.
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