Next Generation National Payment Systems
Enhancing the Current Payment Systems with a Digital National/Fiat Currency

Bradley Wilkes, CEO WingCash
Agenda

1. What is Good About Currency That We Want to Keep?
2. What are Stakeholders Asking For with Digital Currencies?
3. What are the Next Steps to Embrace the Opportunity?
What is Good About Currency That We Want to Keep?
## Attributes of Currency

<table>
<thead>
<tr>
<th>Physical Currency</th>
<th>National (Fiat) Currency</th>
<th>Physical National (Fiat) Currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Medium of Exchange</td>
<td>1. Legal Status (i.e., legal tender)</td>
<td>A National Currency that Reduces Friction and Creates Trust</td>
</tr>
<tr>
<td>2. Unit of Account</td>
<td>2. Authorized issuer(s) and distributor(s)</td>
<td></td>
</tr>
<tr>
<td>3. Portable</td>
<td>3. Authentic (i.e., distinguishable from counterfeit)</td>
<td></td>
</tr>
<tr>
<td>4. Divisible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Fungible</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Reduces Friction
- Creates Trust
What are Stakeholders Asking For with Digital Currency?
Building a National Digital Currency

Key stakeholders in the process:

- **Consumers**: Ability to instantly send and receive money as easily as documents, photos, and messages.
- **Businesses**: Participate in digital commerce at lower transaction costs.
- **Central Banks**: Ability to publish currency digitally at lower cost than paper printing and maintain ability to manage money supply.
- **Commercial Banks**: Maintain relationships with commercial customers and continue to maintain revenue model.
- **Fintech / Developers**: Develop applications on robust, flexible and standardized platforms.
Excerpts from the Fed’s Faster Payments Task Force Video
People are confused by our current payment system. Some payments get there in two days, some in one day…when people look at the fact that they can send a text to a friend with a big file attached, people ask ‘why can’t I do that with money as well?’

When the recommendations are implemented, business will have an increase in working capital and decrease in reliance on more expensive credit.

Success will be the ability for anyone to make a payment to anyone.
What About Block Chain & Cryptocurrencies?

We should not confuse the block chain technology with cryptocurrencies

Block Chain Technology (distributed ledgers) – enable tracking and faster transactions at lower cost

- Banks and interbank networks exploring how to use the technology to increase speed, lessen reliance on intermediaries and lower costs
- Other sectors, including, shipping, logistics, medical records, are looking to use it to track supply chain movement and more

Cryptocurrencies – non-national digital currencies

- Pros: Offer high transaction speed, low cost, ease of cross border use, current issues with current national systems, but likely to be resolved over time
- Cons: Lack backing like national currency and associated trust; recently uptick in investment and appreciation, but still little acceptance as payment

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## National Currencies & Cryptocurrencies: Similarities

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>NATIONAL CURRENCY</th>
<th>CRYPTOCURRENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINALITY</td>
<td>Irrevocable</td>
<td>Irrevocable</td>
</tr>
<tr>
<td>INSTRUMENT TYPE</td>
<td>Bearer</td>
<td>Bearer</td>
</tr>
<tr>
<td>TRANSFER</td>
<td>Immediate</td>
<td>Immediate</td>
</tr>
<tr>
<td>VISIBILITY</td>
<td>Privacy</td>
<td>Anonymity</td>
</tr>
<tr>
<td>VERIFY AUTHENTICITY</td>
<td>Printed Security Features</td>
<td>PKI</td>
</tr>
</tbody>
</table>

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## National Currencies & Cryptocurrencies: Differences

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>NATIONAL CURRENCY</th>
<th>CRYPTOCURRENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISSUERS</td>
<td>Treasury / Central Banks</td>
<td>Mining Computers</td>
</tr>
<tr>
<td>DISTRIBUTORS</td>
<td>Depositories and/or Commercial Banks</td>
<td>Mining</td>
</tr>
<tr>
<td>BACKING</td>
<td>Backed by the Government</td>
<td>None</td>
</tr>
<tr>
<td>STATUS</td>
<td>Legally Authorized</td>
<td>Undefined</td>
</tr>
<tr>
<td>STABILITY / VOLATILITY</td>
<td>1 to 1 with National Currency</td>
<td>Wide Fluctuations</td>
</tr>
<tr>
<td>LEDGER</td>
<td>Fed/Depository Institutions/None</td>
<td>Distributed</td>
</tr>
<tr>
<td>PRODUCTION COST</td>
<td>Negligible (nickels per banknote)</td>
<td>Processing Power (Electricity Cost)</td>
</tr>
</tbody>
</table>
A Reflection

Where do we go from here…

1. Meet Stakeholder needs
2. Stick with “tried and true” principles
What are the Next Steps to Embrace the Opportunity?
What’s Next to Advance Effective Digital National Currencies?

Possible Next Steps Include:

1. Pursue the steps outlined in the Faster Payment Task force, as appropriate for your company or system.

2. Identify, test, pilot and implement the right set of technologies and processes to meet the guidelines you desire, which may match those recommended in Part 2 of the Federal Reserve’s Faster Payments initiatives or similar study.
Key Attributes of an Enabling Platform

- Directory Services
- Flexible Design (Interoperability)
- Rich Data Formats
- Configurable Workflows
- Rapidly Scalable
Summary

We can and should build on what is good as we embrace digital

1. The existing Physical National/Fiat Currency System has a lot of good attributes we want to preserve which reduce friction and create trust

2. Adding fully digital capabilities should consider the needs of major stakeholders including consumers, businesses, central banks, commercial banks and financial technology application developers

3. We can address the needs of major stakeholders as we create digital capabilities by designing processes and leveraging technologies that meet key principles
Thank You

brad@wingcash.com