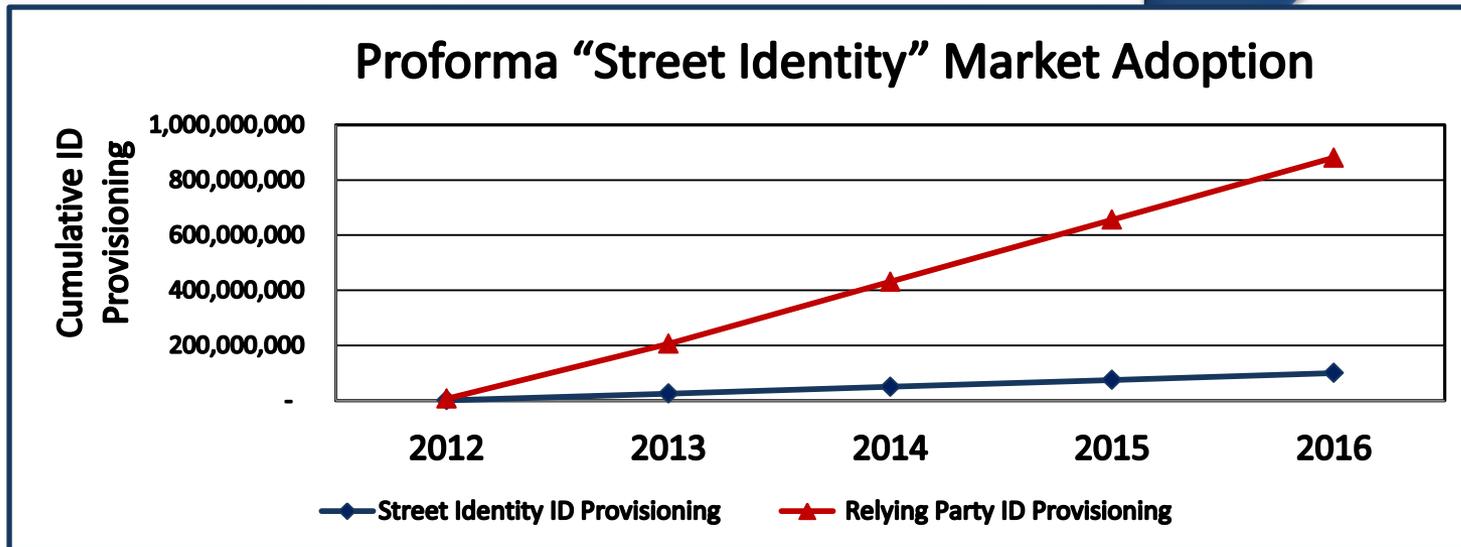
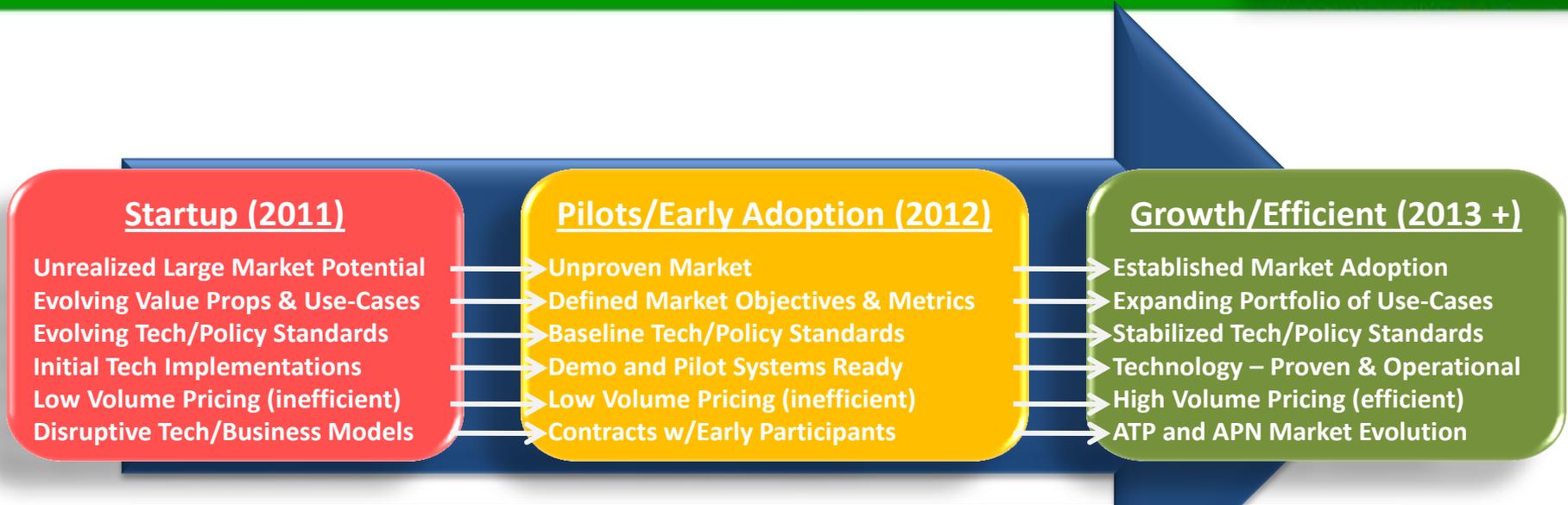




***Online Identity Attribute Exchange
2012 Initiatives***

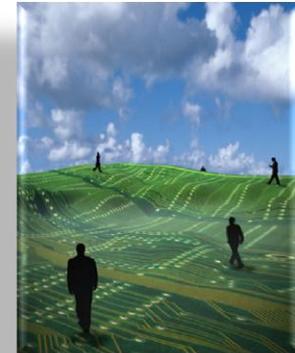
Market Opportunity



Exploring Real World Use Cases

How do I connect a digital identity presented to my web site to a real person?

- Simply
 - APIs and Policy management
- With minimal friction to my customer
 - Privacy protective, opt-in / opt-out
- Cost effectively
 - Including process management
- Scalably
 - Web single sign on



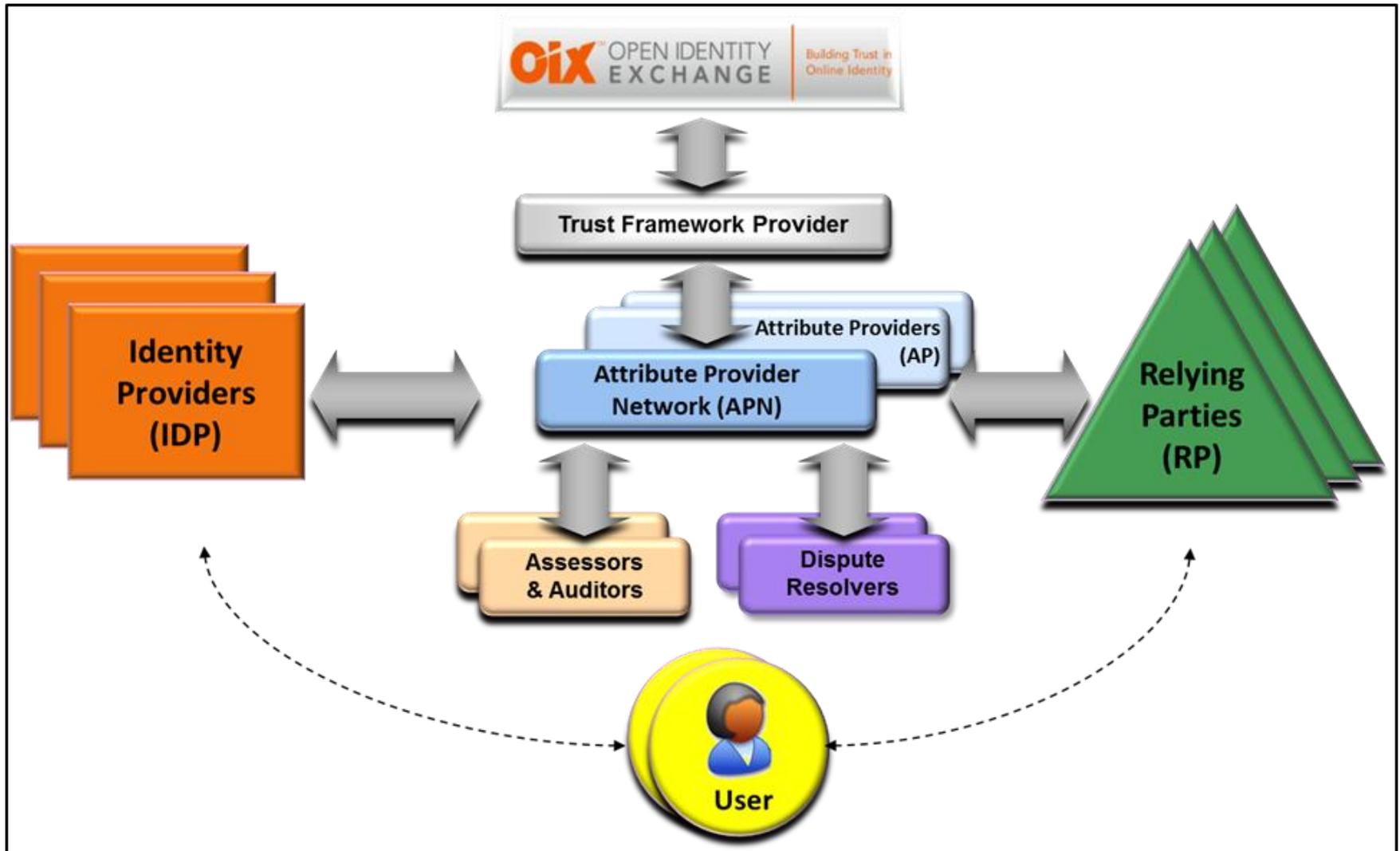
How do I as service provider or retailer verify customer information at my web site?

- At an affordable price point
- With appropriate confidence
- In a way that is consistent with my web site user experience and services

How do I obtain real world information to support my customer transactions?

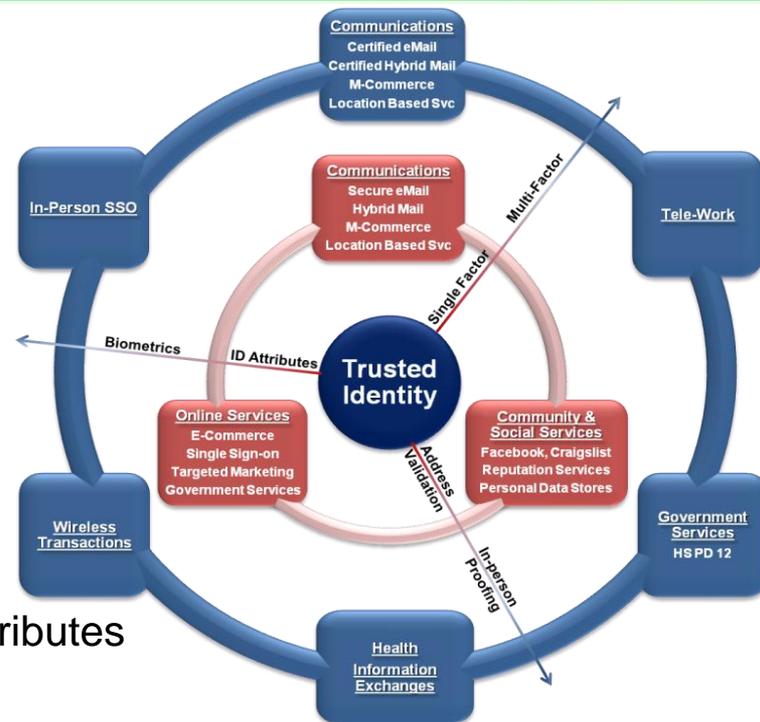
- Minimizes what I have to ask the customer
- Allows me to market to them more effectively
- Increases the array of services I can offer
- Reduces my fraud loss rate

Attribute Exchange Ecosystem



Benefits to Relying Parties

- Federated Login
 - Simplify and increase sign-up/sign-in
 - Lower help desk costs
 - Improve security & reduce fraud
 - Strengthen trust and brand
- Online Identity Attribute Exchange
 - Stronger authentication
 - User asserted, verified & permissioned attributes
 - User-centric privacy
 - Reduce cost of identity attributes per user
 - Sell higher value products/services
 - Improve target advertising
- Advanced Online Applications (APIs)



Enhancing Online Experience

- Frictionless registration of new customers
 - Financial service providers, doctors, insurance, etc.
- Access to premium media content anywhere
- Access to citizen services
- Internet access to medical services
- Targeted and location-based marketing
- Mobile service provisioning
- Mobile payment applications
- Supply chain management



Concurrent Engineering

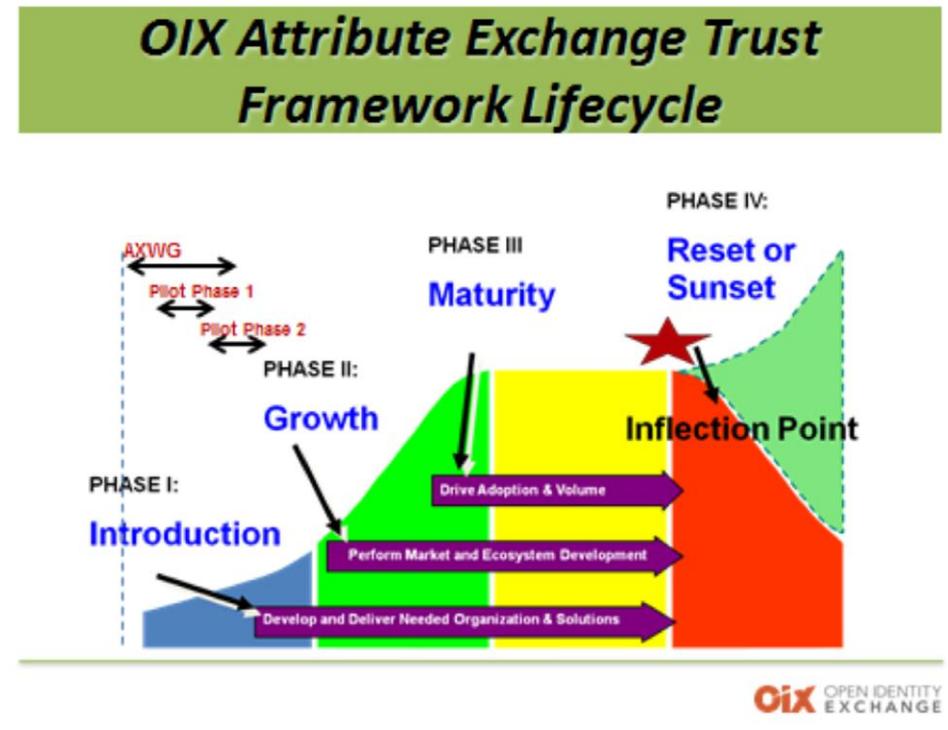


Attribute Exchange Pilots

- AX Phase 1: **Q2 2012 – Q3 2012**
- AX Phase 2: **Q3 2012 – Q1 2013**
- US NSTIC
- UK tScheme

Attribute Exchange Trust Framework

- Levels of Protection
- Levels of Assurance
- Levels of Control
- Audit and Assessment
- Certification and Dispute Resolution



Attribute Exchange Pilots



• Purpose:

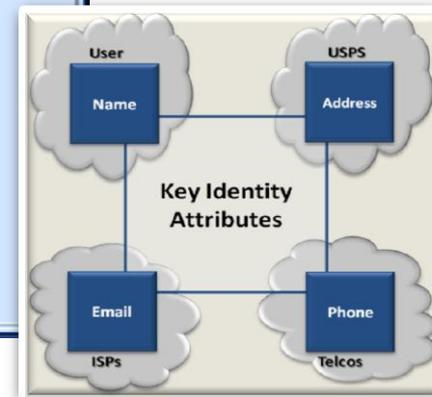
- Demonstrate online attribute exchange operations
- User, AP, IDP and RP interfaces and process/data flows
- Legal, policy and technical interoperability, security and scalability
- Business models
- Assessor roles and processes

• Objectives:

- Simplify AP, RP and IDP participation, deploy new online services and demonstrate asset monetization via an *Attribute Provider Network platform*
- AP online verification services
- Hybrid Mail AP service – PIN code mail piece
- **Live User data** for 1+ Google RP, 2+ commercial RPs, 2+ Government RPs
- RP billing (monthly) and AP/IDP transaction/payment statements

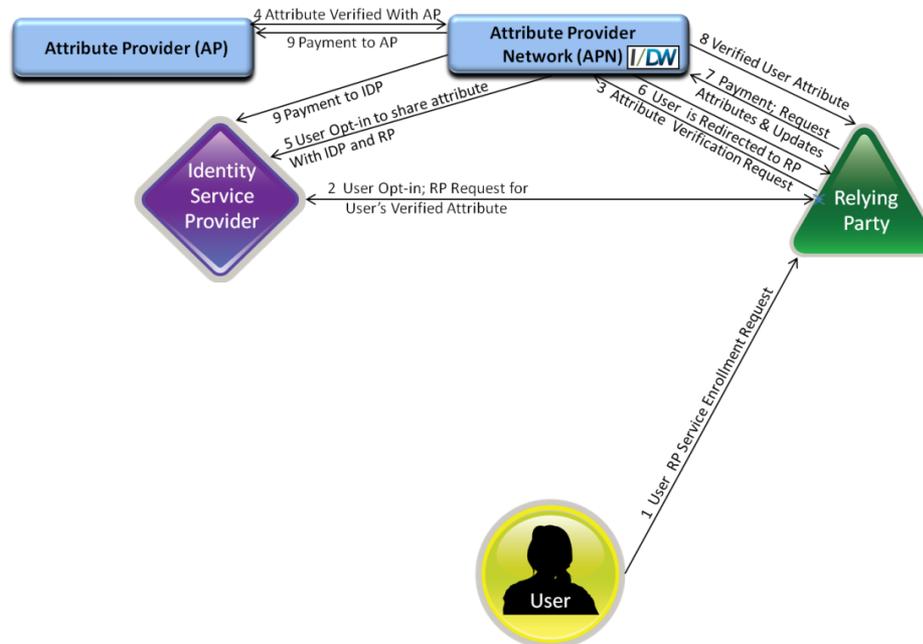
• Scope:

- Limited to key identity attributes (NEAT) initially
- **For each RP service:** Free market Trial of verified attribute services for 90 days or 50,000 Users, whichever occurs first



Attribute Provider Network

- Online market channel manages attribute processing – **no OCI**
- Software as a Service (SaaS) Attribute Provider Network Features
 - **Business:** Simplify ability to participate, deploy new services, and monetize assets
 - **Legal:** N-to-1 standard contracts, audit logs/processes, SLA's
 - **Technology:** Secure, N-to-1 open APIs for all participants
- Attribute Provider Network Benefits
 - Account control: new RP contracts, new User verifications, User attribute re-use
 - Attribute Processing and Payment (APP) algorithms

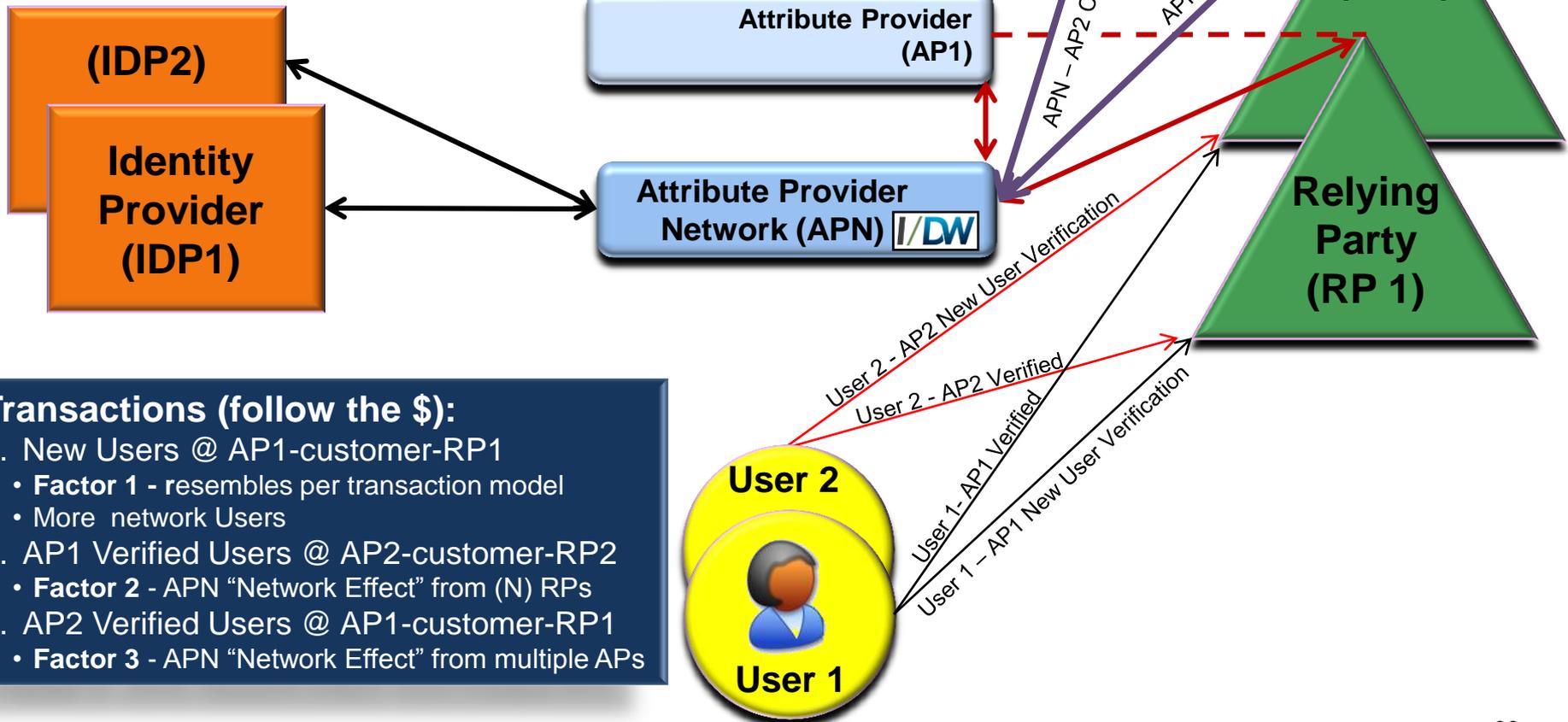


Monetizing Attribute Exchange



Assumptions:

- APs have enterprise service contracts with RPs
- APs will offer their RP customers new online services via an APN ("AP customer RP")



Transactions (follow the \$):

1. New Users @ AP1-customer-RP1
 - **Factor 1** - resembles per transaction model
 - More network Users
2. AP1 Verified Users @ AP2-customer-RP2
 - **Factor 2** - APN "Network Effect" from (N) RPs
3. AP2 Verified Users @ AP1-customer-RP1
 - **Factor 3** - APN "Network Effect" from multiple APs