Evolving PHR Market

Analysis & Trends

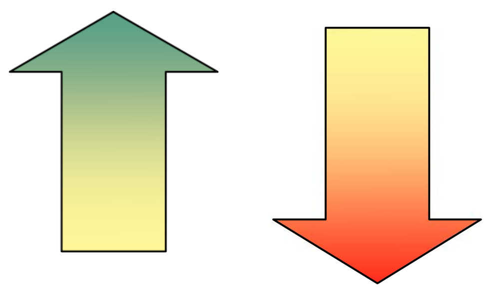
Presented for HHS, AHIC Consumer Empowerment Workgroup

June 17, 2008

By: John Moore, Managing Director
Chilmark Research
John@ChilmarkResearch.com

Three Take-Aways

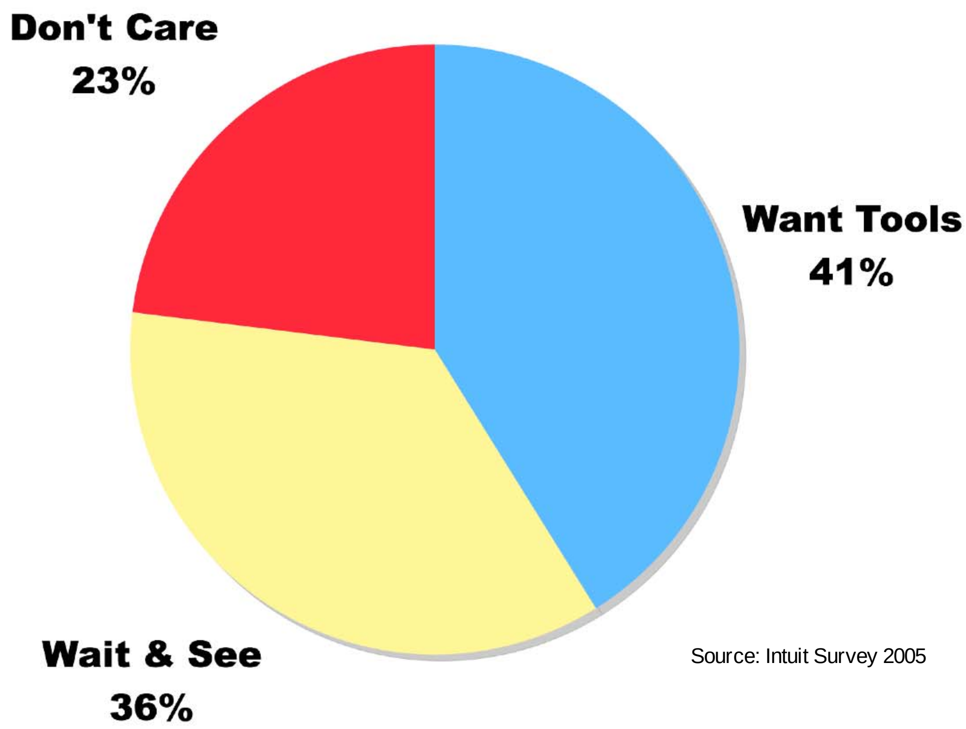
- **What is Market Structure Today**
- **How will Market Evolve**
  - 4 Generations
- **Trajectory**
  - Drivers
  - Challenges
  - What to Watch



PHR Market has Re-ignited

Who is Engaging a PHR

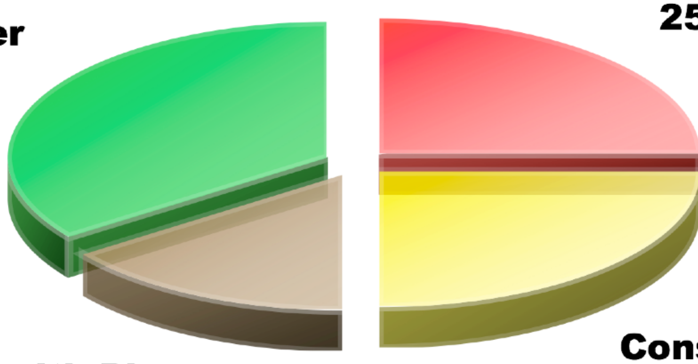
- **Total Adoption Today: ~5-7%**
- **Consumer Profile:**
  - Mid to Upper Class
  - Middle Aged
  - Working Mothers with Medical Proxy
  - Chronic Care & Web-savvy
- **Little Adoption Among Healthy**



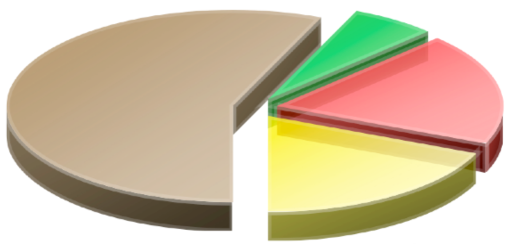
Source: Intuit Survey 2005

Financial "Skin in the Game" will Play a Large Role

Market has Moved to B2B Model



Primary Market



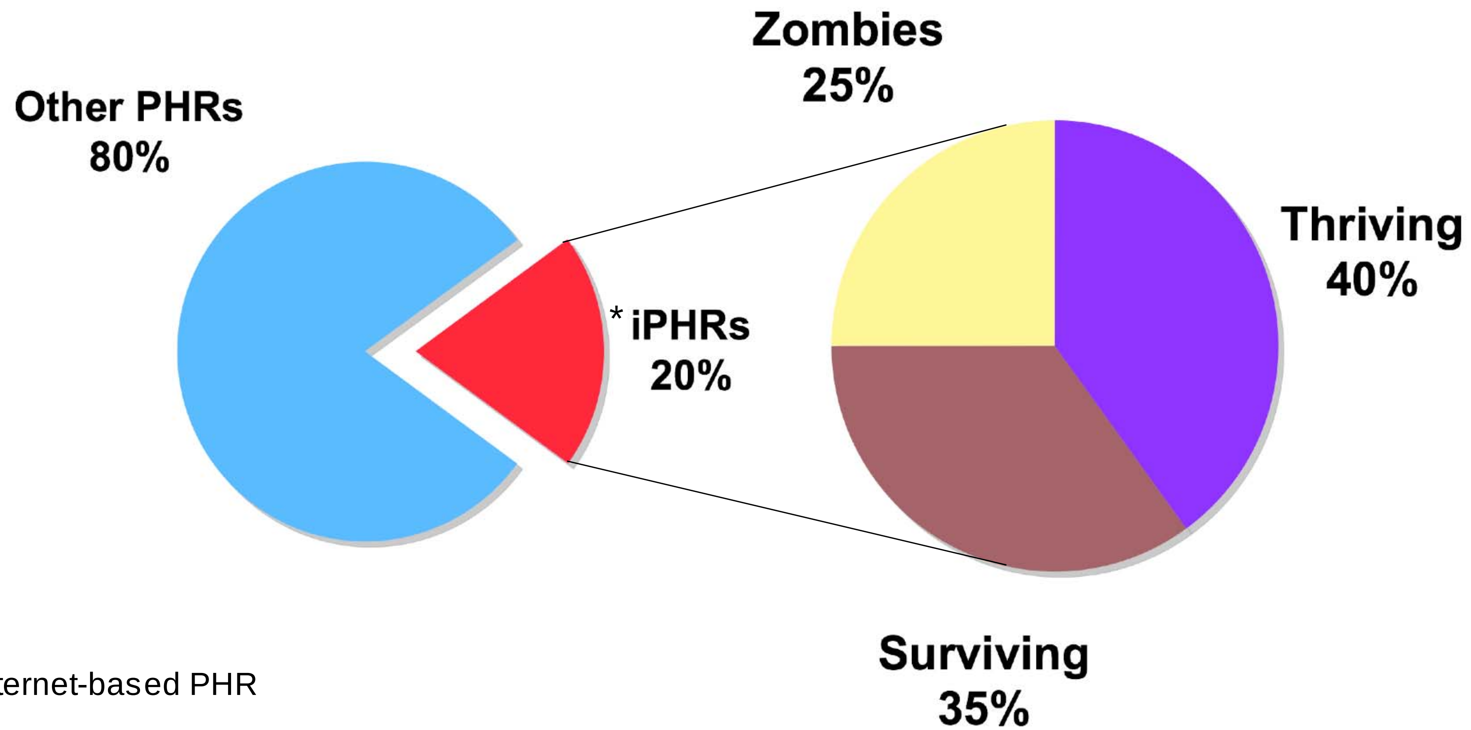
Secondary Market

- High Barriers to Entry in Provider Market
- Employer & Health Plan Markets Similar
- Consumer Plays are Often Legacy

PHR Sponsors

Sponsor	Motivation(s)	(+)	(-)
Employer	◆Lower HC costs ◆Increase productivity ◆Support CDHP	◆Health & wellness ◆Integrated to HR package ◆Can be comprehensive	◆Trust ◆Incentives required ◆Most are tethered
Health Plan	◆Lower medical losses ◆Behavioral change ◆Differentiator - CDHP	◆Claims & meds ◆HRA & PBM ◆Domain expertise ◆Provider info	◆Trust ◆Claims data not clinical ◆Most are tethered
Provider	◆Customer retention ◆Workflow ◆Lower Readmissions	◆Clinical & lab data ◆Online consultations, scheduling, Rx refill ◆Trust	◆Not comprehensive ◆Not interactive ◆Most are tethered
Consumer	◆Chronic disease mgmt ◆Care mgmt ◆CDHP mgmt	◆Motivated ◆Personal control ◆Portable	◆Disconnected - self entry ◆Low adoption ◆Privacy & security

PHR Market is Highly Fragmented



*iPHRs: Internet-based PHR

Extremely Difficult to Choose Viable Solution

1st Generation: Isolated

- **Target: End Consumer**
- **Most 3rd Party PHRs Stuck Here**
  - 85% of those interviewed
- **Adoption Remains Low**
  - Generic
    - **Little personalization**
  - Self-entry
    - **Only for *VERY* motivated**

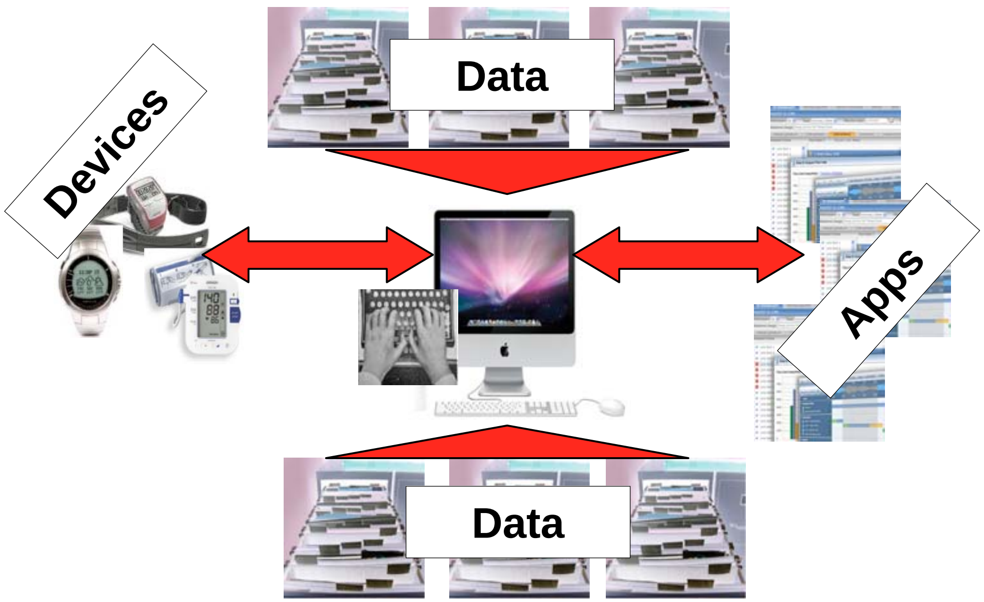
Value: Track & Manage Care

2nd Generation: Online with Some Data

- **Target: Businesses**
  - Insurers, Employers, Providers
- **Land Rush by Insurers & Employers**
  - Manage/Lower Risks
    - **HRAs, Behaviors, CDHP**
- **Provider Market Dominated by EMR Vendors**
  - Customer Retention
    - **Communication**
- **Adoption Highly Variable**
  - Trust, Perceived Value
    - **Incentives often req'd**
  - Some self-entry required
  - Portability?

Value: Facilitate Interaction, Promote Healthy Behavior

3rd Generation: Highly Networked Utility

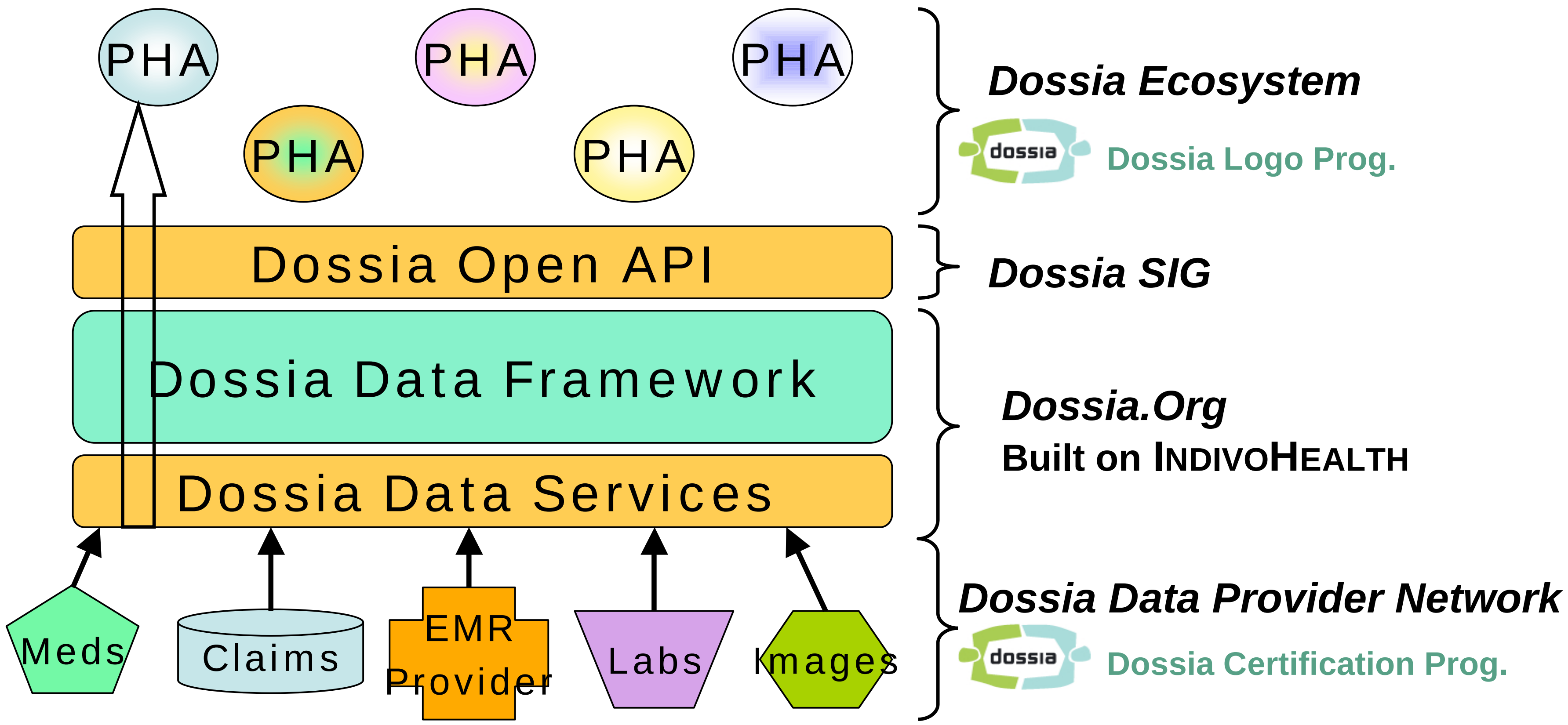


Not a PHR, but a Platform: Personal Health System (PHS)

- **Target: Consumers**
  - Exception - Dossia
- **Three Dominant Players**
  - Dossia, Google, HealthVault
- **Utility Service Model**
  - Perform Heavy Lifting
    - **Data Repository**
      - Multiple sources
  - Identification Mgmt
  - Security/Privacy
- **Market Contraction**
  - Accelerate Demise of Weak
- **Adoption Unknown**
  - Can They Get the Data?
  - Can They Build an Ecosystem?
  - Trust, Value

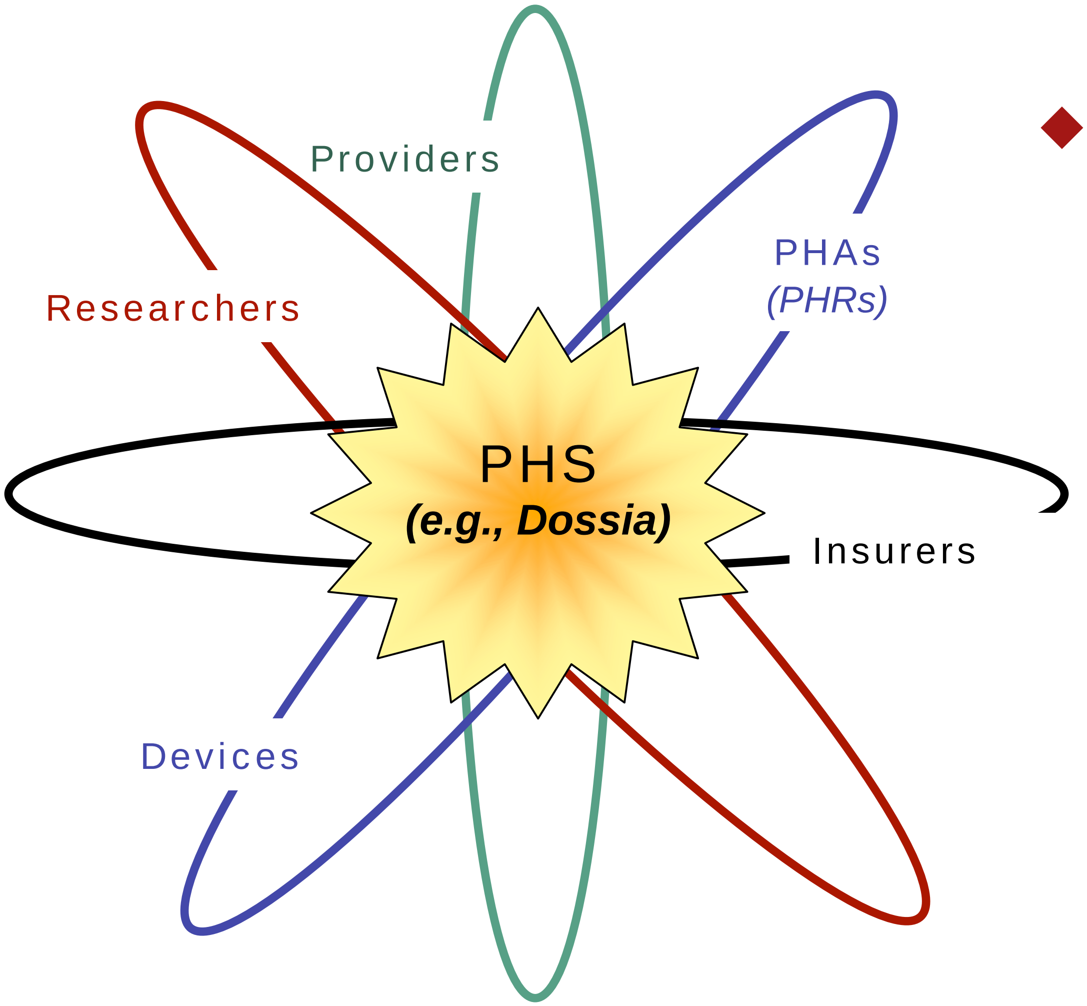
Value: Richer Data = Richer Experience

Dossia's Utility Model



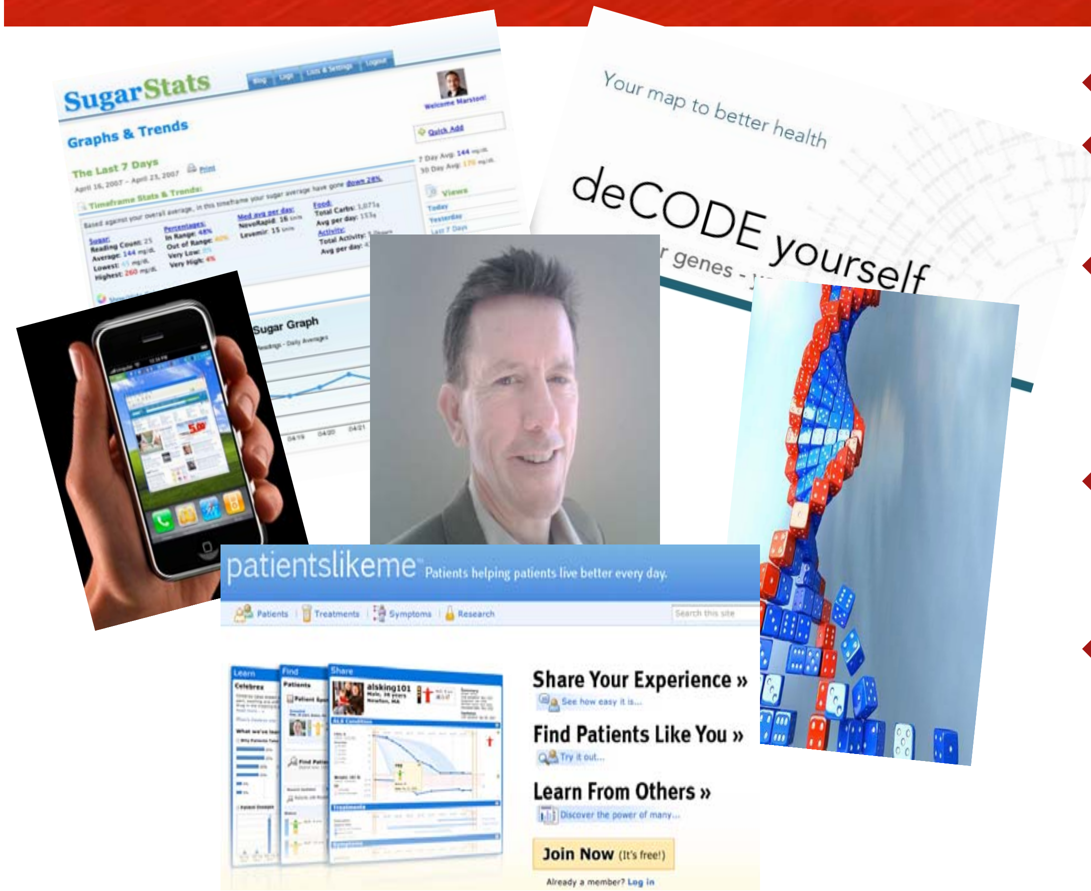
Google Health & HealthVault have Similar Models

Successful (PHSs) Will Evolve Into Ecosystems



- **If Successful…**
  - Data Consolidation
    - **Data liquidity**
  - Unmatched Richness
  - Game Changing
  - Consumer Empowering

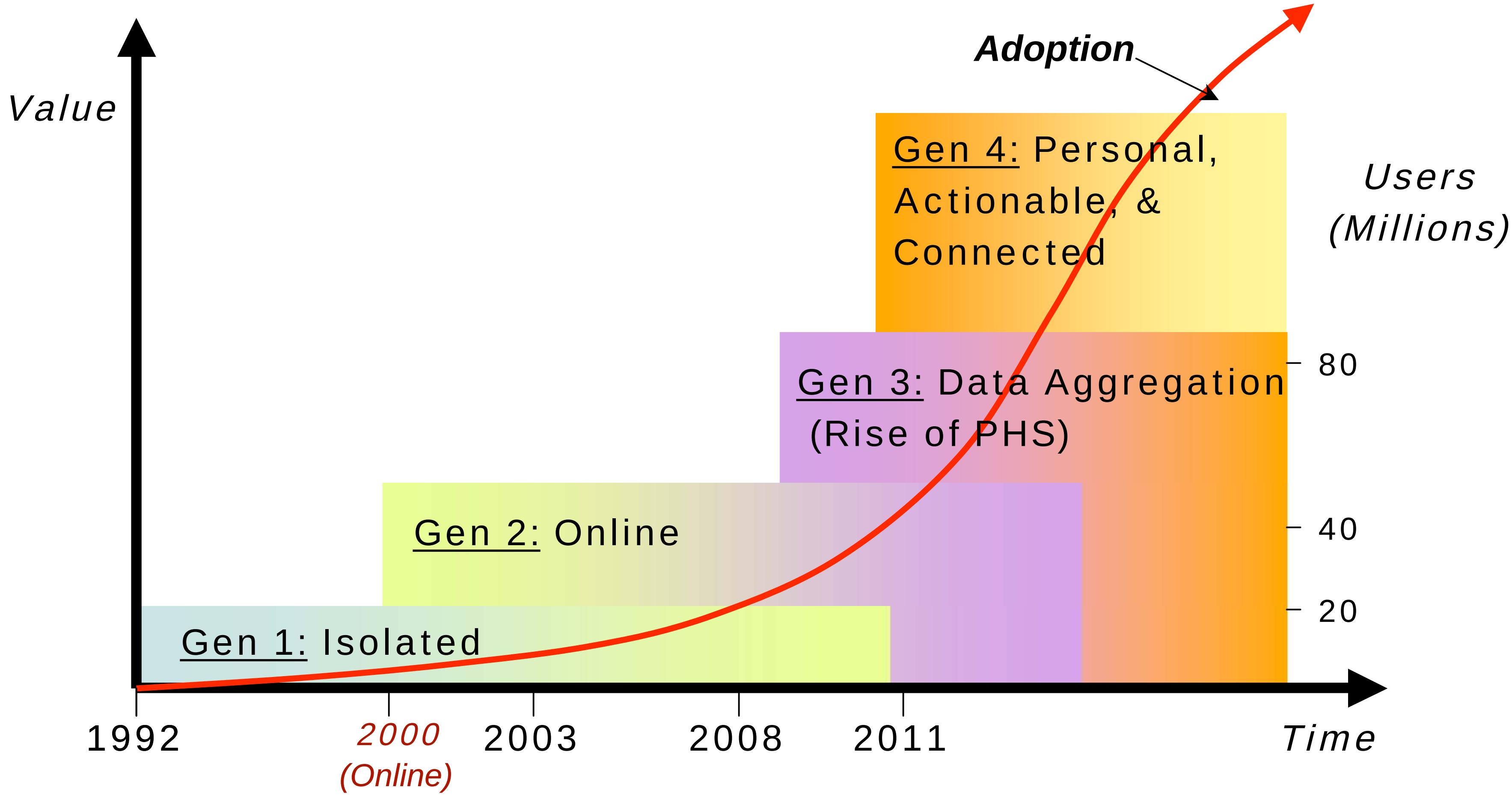
4th Generation: Personal, Actionable, Connected



- **Target: All Markets**
- **Leverage Utility Services**
  - Now that we have the data…
- **Market Fragmentation**
  - Proliferation of Apps & Widgets
    - **Serve highly individual needs**
    - **Enable personalized medicine**
- **Seamless Integration**
  - "SPIME"
    - **Always on**
- **Adoption Predicated On…**
  - Liquid Data
    - **Success of ecosystems**
  - Consumer Value

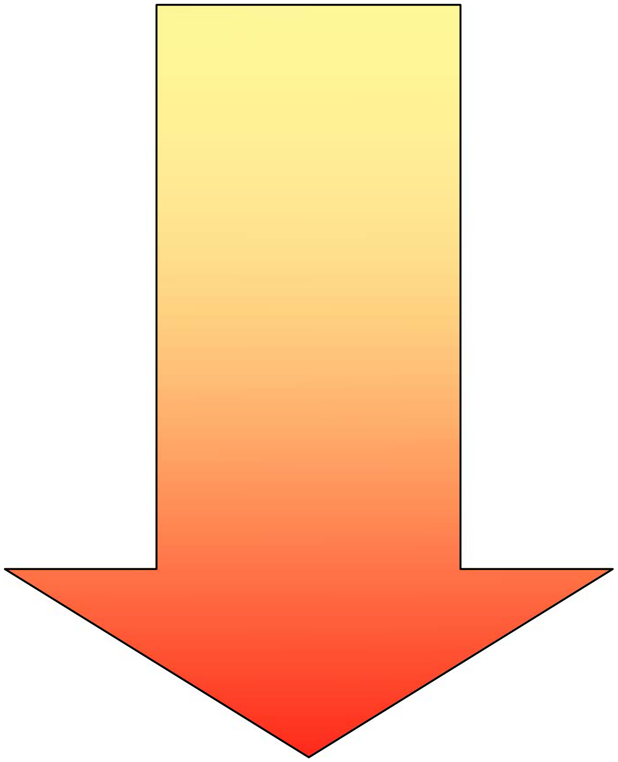
Value: About Me, By Me, With Me, For Me

PHR Evolution Accelerates Adoption



Moving Ahead:
Adoption Challenges Remain

- **Data Liquidity**
  - EMR adoption
  - Standards Adoption
  - Policies & Incentives
    - **Portability**
- **Trust**
  - Health Plan, Employer, 3rd Party
- **Consumer Apathy / Indifference**
  - Education
  - Incentives
- **Solution Capabilities**
  - Immature, Disparate



Drivers to Overcome Challenges

- **Accelerating, Employer-led Initiatives**
  - Financial Skin
- **Consumerism Entering Healthcare**
  - Visibility, Education
- **Accelerating IT Adoption Among Providers**
  - E-Consultations
- **New Consumer-centric Technologies & Tools**
  - Delivering Radically New Capabilities
- **Disintermediation of Care**
  - Retail Clinics, Med Tourism, etc.

Will Consumer Drive Needed Change?

What to Watch

- **Traction of Platform Plays**
  - Data Sources (agreements)
    - **E.g., Cleveland-Google, KP-MS**
  - Consumer Adoption
    - **Sub-group types**
  - Developer Adoption
    - **Popular apps/services**
- **Market Consolidation**
  - Rationalization
  - Acquisitions
- **Employer Successes**
  - Demonstrable ROI

The world is moving so fast these days that the one who says it can't be done is generally interrupted by someone doing it.

- Harry Emerson Fosdick