

The NEW State of the Biometrics Market

presented by



September 8, 2008 Chicago c. maxine most acuity market intelligence cmaxmost@acuitymi.com





Acuity Market Intelligence is an emerging technology strategy and research consultancy with a proven record of accurately anticipating biometric and associated identification solutions market trends.

Markets Identification Solutions, Biometrics, Authentication

Services Market Research, Analysis & Strategic Planning

Opportunity Assessment & Analysis

Technology Adoption & Deployment Evaluations

Clients Vendors, Solution Providers, Integrators, Investors, End Users



























































Premise

The market for biometric is in a strange state and will most likely not follow the typical path of disruptive technology adoption.

Biometrics is *no longer* behaving like a "typical" emerging technology market





Today's Discussion

Market Landscape Market Dynamics

Atypical Adoption

Technology Adoption Classic TAL Model

Lifecycle Redux Historical Adoption Rates

Adoption

Perspective The Future: Personal Identity Ownership

Market Growth

Market Evolution

Moving Forward Strategic Opportunity

The Bottom Line





Market Landscape





Market Dynamics

- Post 9/11 security concerns created an expectation of rapid market acceleration that never materialized
- Government sector driving requirements for large scale identification solution infrastructure
 - ☐ Slow progress, on-going delays, programs unrealized:
 - TWIC, Registered Traveler, REAL ID, US-VISIT
 - Enrollment and issuance services deployed independently of authentication capability
- Industry has not taken market development initiative *crucial for emerging technology markets*
 - Defining marketplace
 - Positioning as key *identification solutions enabler* delivering reliable, trusted, privacy enhancing authentication of individuals.
- Industry lacks thought leaderships and vision for both technology and solution development.

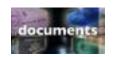




Atypical Market Development

- Biometrics market not following typical path of disruptive technology adoption
 - Biometrics have been considered a disruptive innovation on the verge of breakthrough for an extended period of time
 - Breakthrough has not happened for several reasons.
 - Industry focus on incremental technology performance improvements while technology has not delivered on its promise in terms of capabilities
 - Solutions context has not been developed to leverage the capabilities that have been available
- Created new/atypical market development environment
 - "Market Making" window passed; Market has been externally defined
 - Biometrics as a class of disruptive or discontinuous technology has not moved completely through its revolutionary market development cycle and yet is now undergoing significant evolutionary or continuous innovation



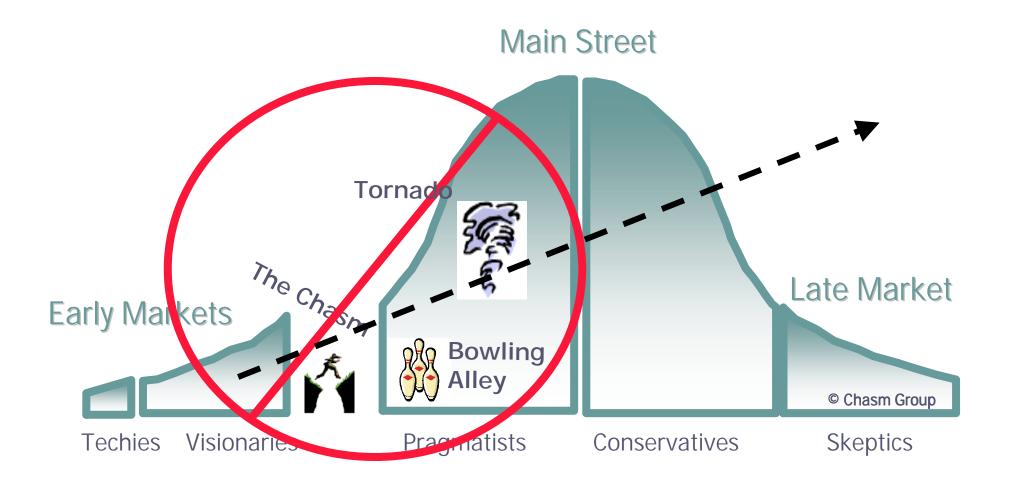


Technology Adoption Lifecycle Redux

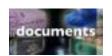




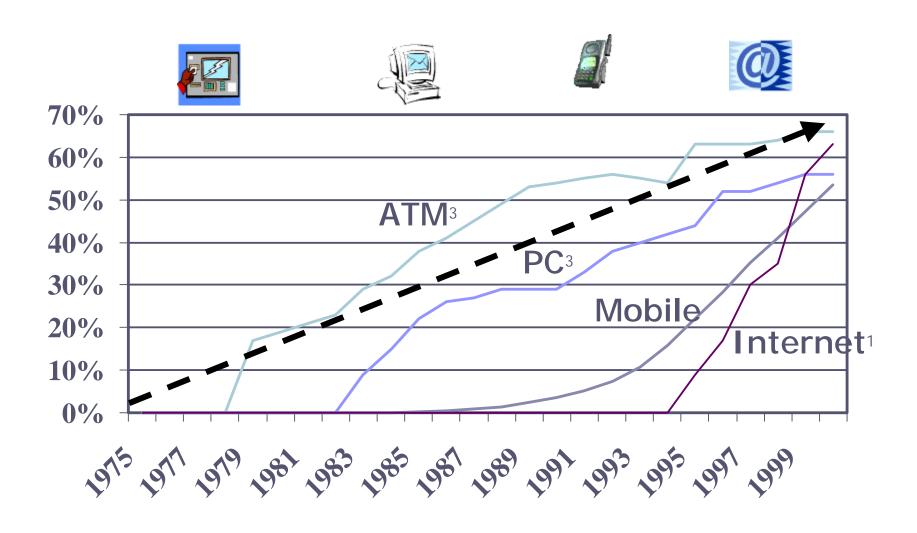
Classic Technology Adoption Lifecycle







Historical Adoption Rates







Adoption

- Clear momentum BUT market growth will be linear not the exponential growth most readily associated with disruptive innovation
- Steady and Sustained Adoption Through 2020
 - NO Explosive Growth No "Tornado"
 - Biometrics adoption will mimic the growth curve of ATMS, which achieved nearly 70% adoption through linear growth over 20 years NOT typical "hockey stick" growth curve of innovations such as mobile phones or the Internet
- System Integrators <u>WAIT</u> for Demand Creation
- Biometric Selection Criteria
 - No One Is Looking for Biometrics Per Se
 - Requires **Solutions** to "**Business Killers**"





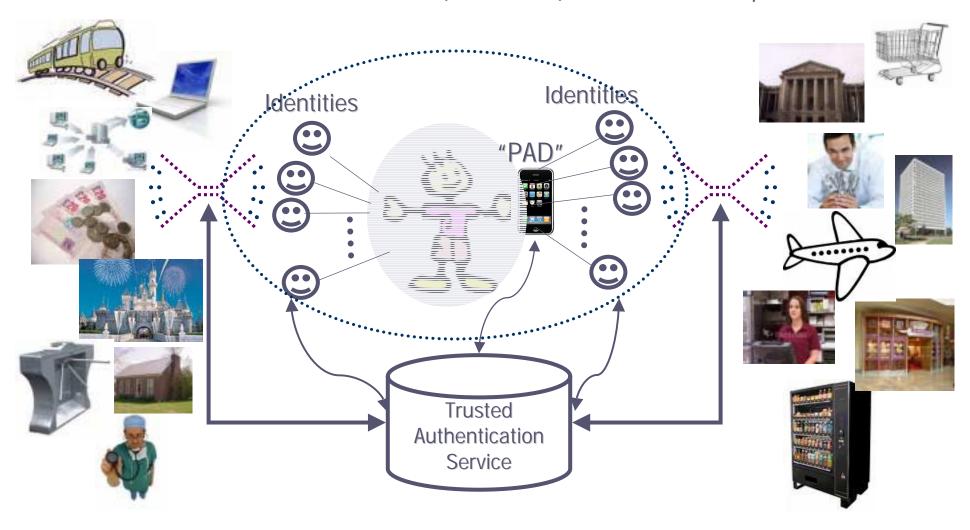
Perspective



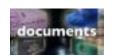


The Future: Personal Identity Ownership

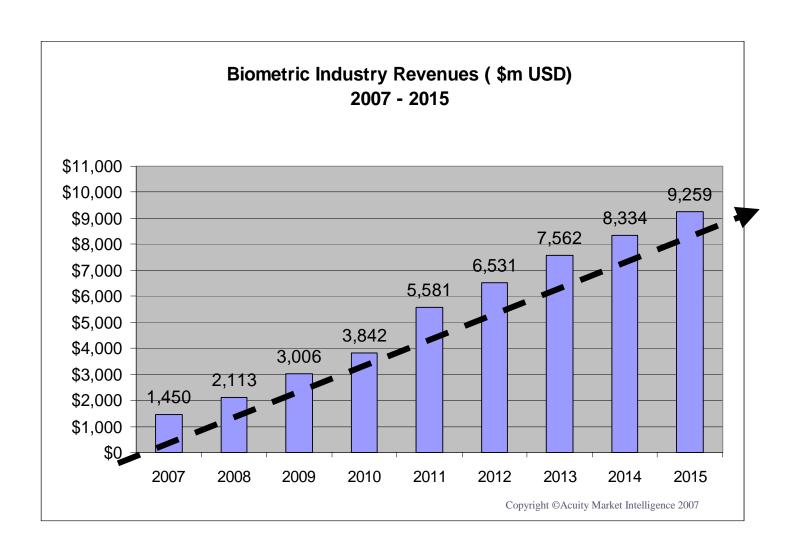
Evolution toward transactions (info & \$\$) inevitable but path unclear







Biometric Market Growth







Market Evolution

Today

Limited Deployment

Expensive

Awkward

Bulky Capture Devices

Mediocre User Experience

Algorithm Dependency

Limited Distance

Proactive Subject Positioning

"High End" Applications

Minimal Solutions Capability

2020

Ubiquitous

Low Cost/High Performance

Flexible Form Factors

Embedded Capture Devices

Algorithm Agnostic

Broad Distance Range

Personal Device Integration

Passive Subject Acquiring

Solutions Portfolio

Consumer Control

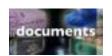
Citizen vs Consumer Use





Moving Forward



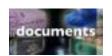


Strategic Opportunity

- Deliver on the promise of biometrics by providing working solutions to real problems - Biometrics that actually work
 - Industry has legacy of undelivered promises, claiming "revolution" or "paradigm shift" is risky.
 - Rather than taking the mantle of champion of disruptive innovation, focus on providing the evolution that *delivers on the promise of biometrics* rather than introducing another revolutionary leap from a tenuous technology platform that many believe is unproven.
- Simultaneously manage progress towards expansion into large looming opportunities while rigorously, systematically addressing immediate market needs
 - Establish the near-term market penetration platform from which largescale market development efforts can be launched
 - ☐ Focus on Phased Implementation for Near, Medium and Long range

Evolution NOT Revolution





The Bottom Line

The Fantasy: The longed for single, monumental event that will

propel biometrics to "Tornado" status is a pipedream

The Reality: All constituents must make the transition from

survival-mode based operations to long-term strategic

thinking that addresses fundamental issues associated

with the development of identity-centric IT

The Challenge: Develop a strategic framework to assess and prioritize

short-term opportunities/requirements within the context of building a highly leveragable strategy that

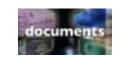
focuses on the long-term capabilities/demands of

biometrically enabled IT. This requires vision,

commitment, and strategic flexibility.







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Questions?

For more Information: www.acuity-mi.com

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