

Transforming to e-Health: HIPAA is the Foundation for e-Business

Doing Business in New Ways

IBM Global Services
National e-Business Strategy
& Change





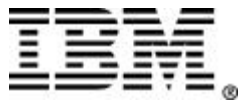
e-Business Paradigm

"Somewhere out there is a bullet with your company's name on it. Somewhere out there is a competitor, unborn and unknown that will render your business model obsolete...the hottest and most dangerous business models out there are on the web."

Fortune Magazine



e-business



Agenda

- Basic Roadmap and E-Line
- New Healthcare Models
- Healthcare Applications
- e-HIPAA: Value Added Proposition



e-business

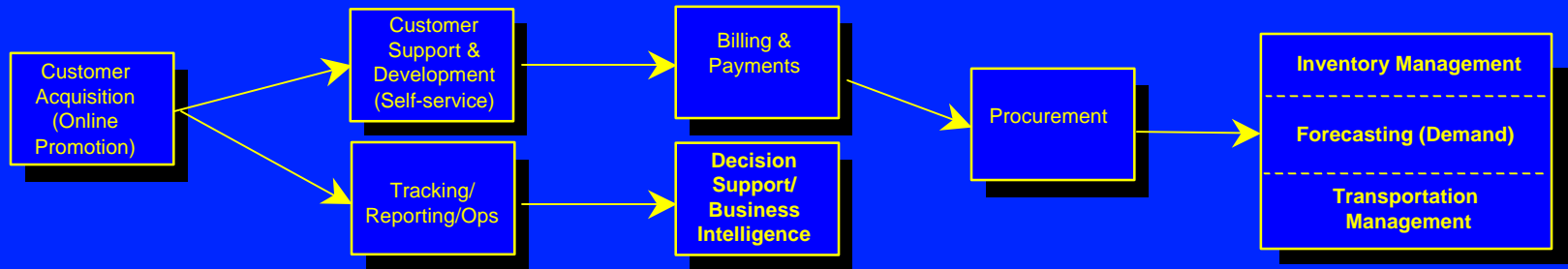


Research Findings by Industry...Healthcare

Road map focus: Integrated payer-provider

Company Characteristics

- Provides full array of care services to a defined population or service area – includes both provider and payer component organizations
- Focus is on minimizing cost structure by streamlining processes and effectively utilizing resources while providing adequate customer service to maintain customer loyalty
- A composite of healthcare entities trying to act as branches of one organization, instead of heterogeneous and disconnected institutions



Customer Acquisition

- Establish Web site
- Product/service information
- Advertising
- Promotions
- Enrollment forms

Customer Support & Development

- Health and wellness information / patient education
- Online nursing/doctor consultations
- Disease management forums
- Benefits, eligibility, claims status
- Referrals, pre-certs, authorizations
- Provider directories/physician profiling
- Prescription inquiries
- Patient test results / formulary history

Tracking/Reporting/Ops

- Electronic medical records
- Medical utilization rates
- Claims analysis
- Provider specific analyses
- Electronic reporting to various constituents
- Enrollment analysis
- Online customer surveys
- Member satisfaction reporting
- Analysis of online consumer interactions
- Comprehensive transaction reports
- Monitor financials
- Online internal information / forms submittal / HR

Billing & Payments

- Electronic claims submission, receipt and remittance
- Automated claims processing (edit checks)
- Electronic Funds Transfer, Web-based payments

Decision Support/Business Intelligence

- Data warehousing of patient encounters and outcomes data
- Data mining to develop clinical best practices protocols
- Develop preventative care programs/case management
- Collaboration infrastructure

Procurement

- Consolidating medical supplies/equipment purchasing
- Supplier search and selection
- Contract negotiating
- Order status

Inventory Management

- Inventory status
- Link to other systems and departments

Forecasting

- Collect historical demand
- Measure facility specific demand and usage rates
- Project future demand

Transportation Management

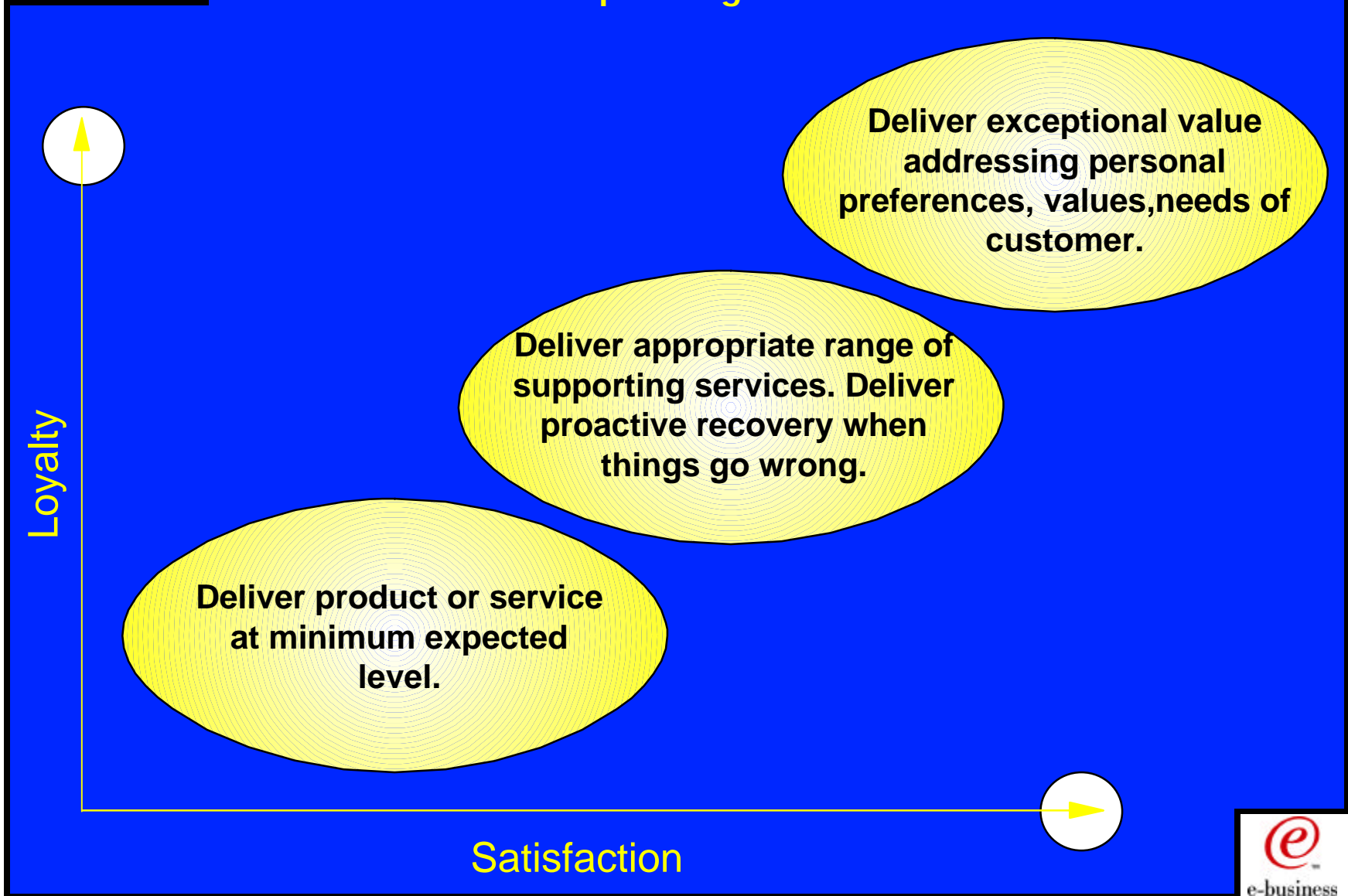
- Delivery status
- Shipping to appropriate facilities
- Warehousing

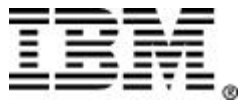




Key Transformation Areas

Customer Relationship Management Value





Payor E-Line: Mainstream Capabilities

- Enrollment, provider directories (members)
- Explanation of benefits, claims status
- Provider authorizations, referrals & eligibility
- Formularies, forms and provider directories
- Sales quotes & proposals
- Product configuration

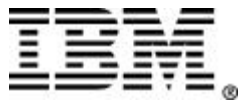




Provider E-Line: Mainstream Functional Capabilities

- Claims submission via EDI
- EDI procurement versus supply chain management
- Static web sites
- Provider directories
- Call center with computer assistance versus customer relationship management (CRM)
- Limited on-line prescription writing





Pharmaceutical E-Line: Mainstream Capabilities

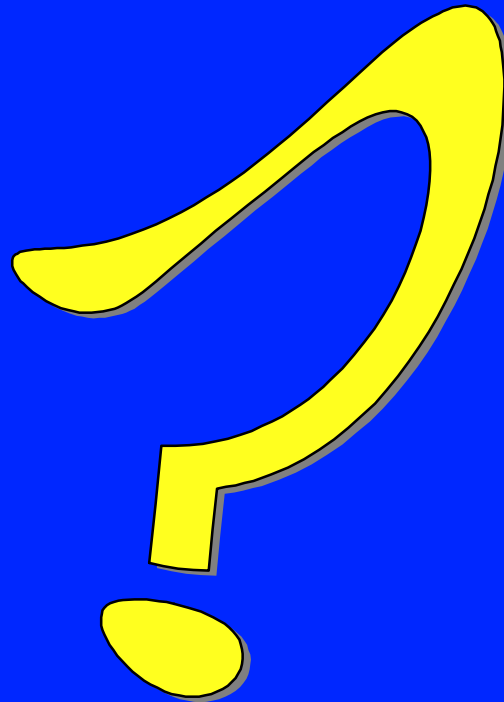
- Web enabled call centers ---> CRM
- e-Procurement
- Product web sites for Providers/Consumers
Without Data Capture
- e-Detailing & Education for Representatives
- Web enabled ERP



e-business

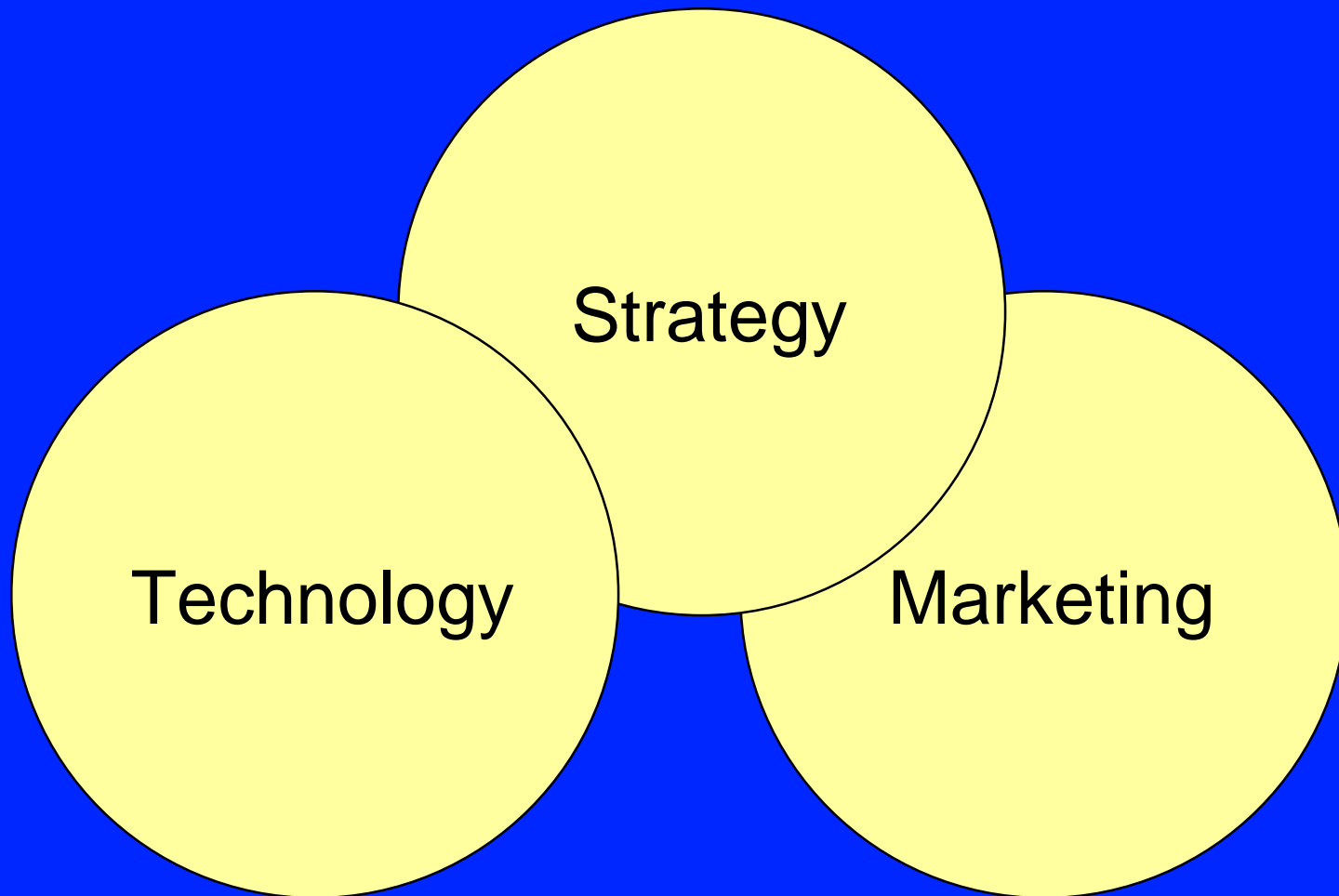


The New Healthcare Model





e-business





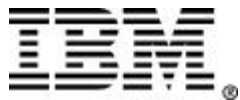
Consumerism: The New Trend for Payors & Providers

- The consumer will define quality - differently
- Choice will be a critical factor
- Consumers will take control of healthcare dollars
- Seamless, single point of care service is important
- Pharmacy costs will continue to be an issue
- Technology will not change healthcare

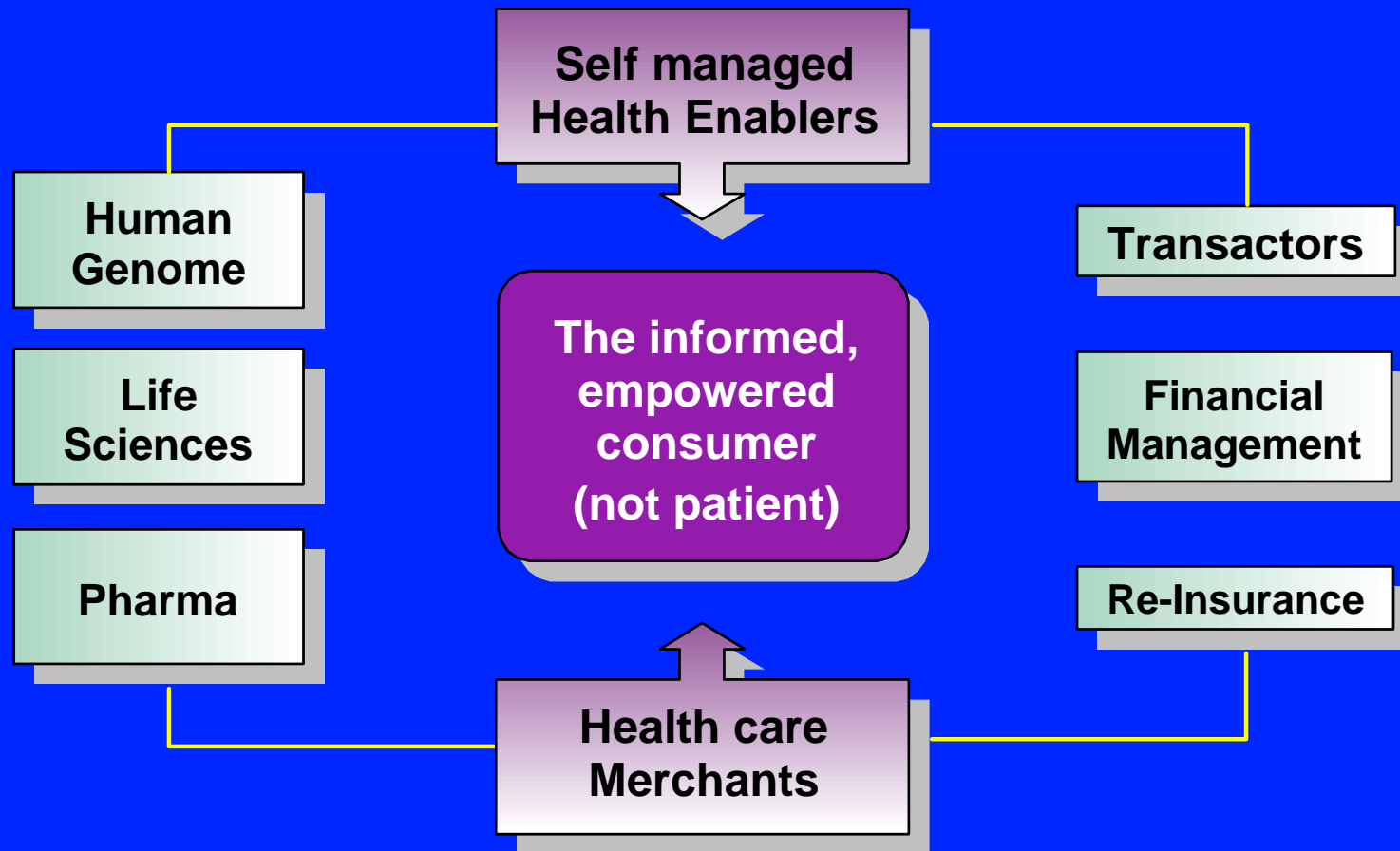
The consumer will change healthcare



e-business



What Will The New Healthcare Look Like?





Understanding Your Business Model

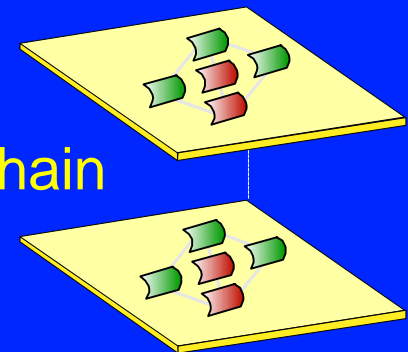
- What functions do you perform?
- For whom do you perform these functions?
- How do you go about performing this function?
- What need do you satisfy?





New Value: Separate information from product

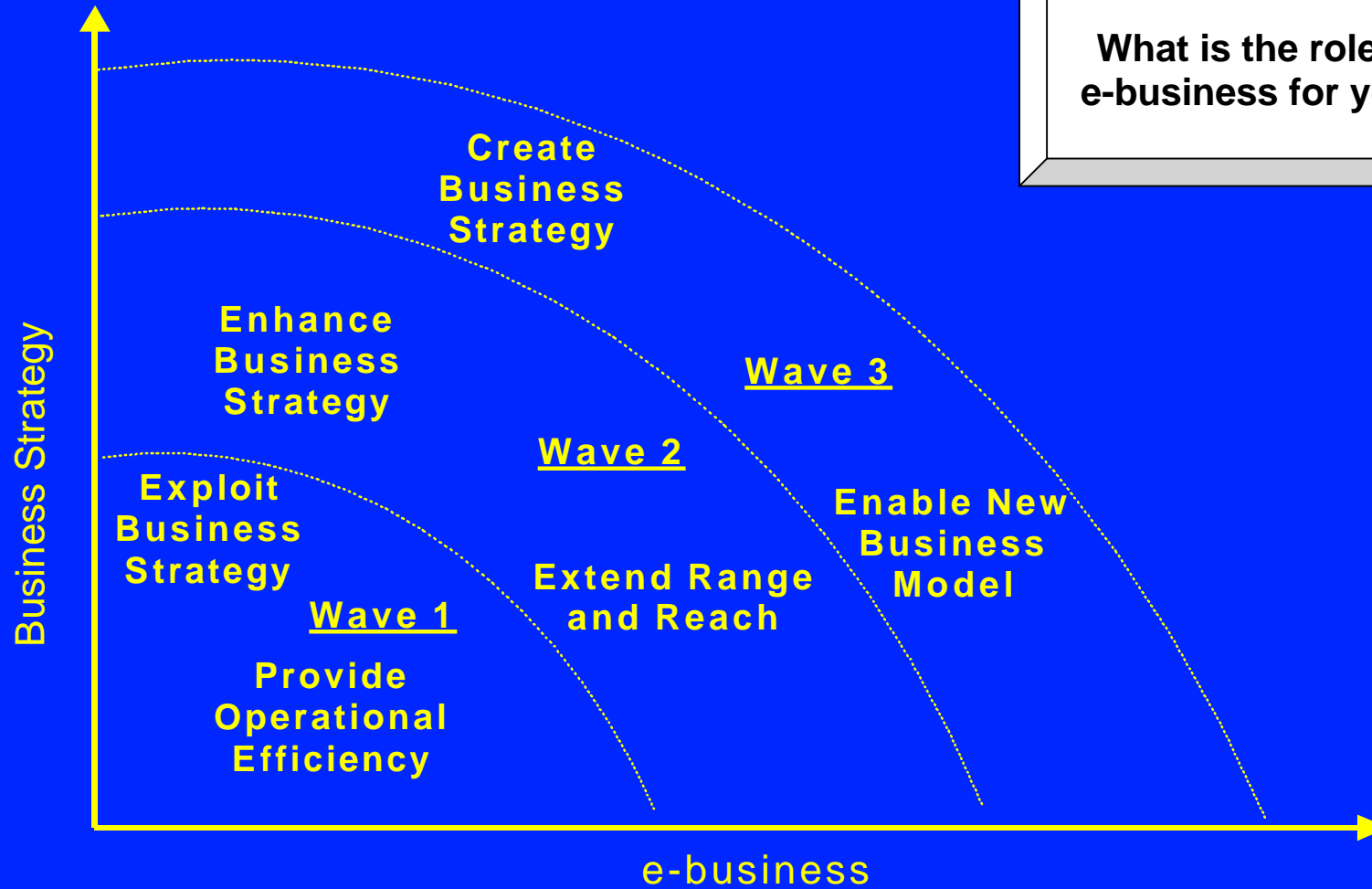
- **Information value net**
 - Information and knowledge flow independent of physical structure
 - Business intelligence
 - Knowledge management as a tool
- **Physical value net**
 - Material and process flow along the supply chain for suppliers
 - Medical care delivery for providers/payers





Business Models for e-Business

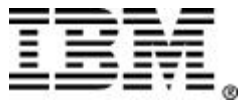
What is the role of e-business for you?



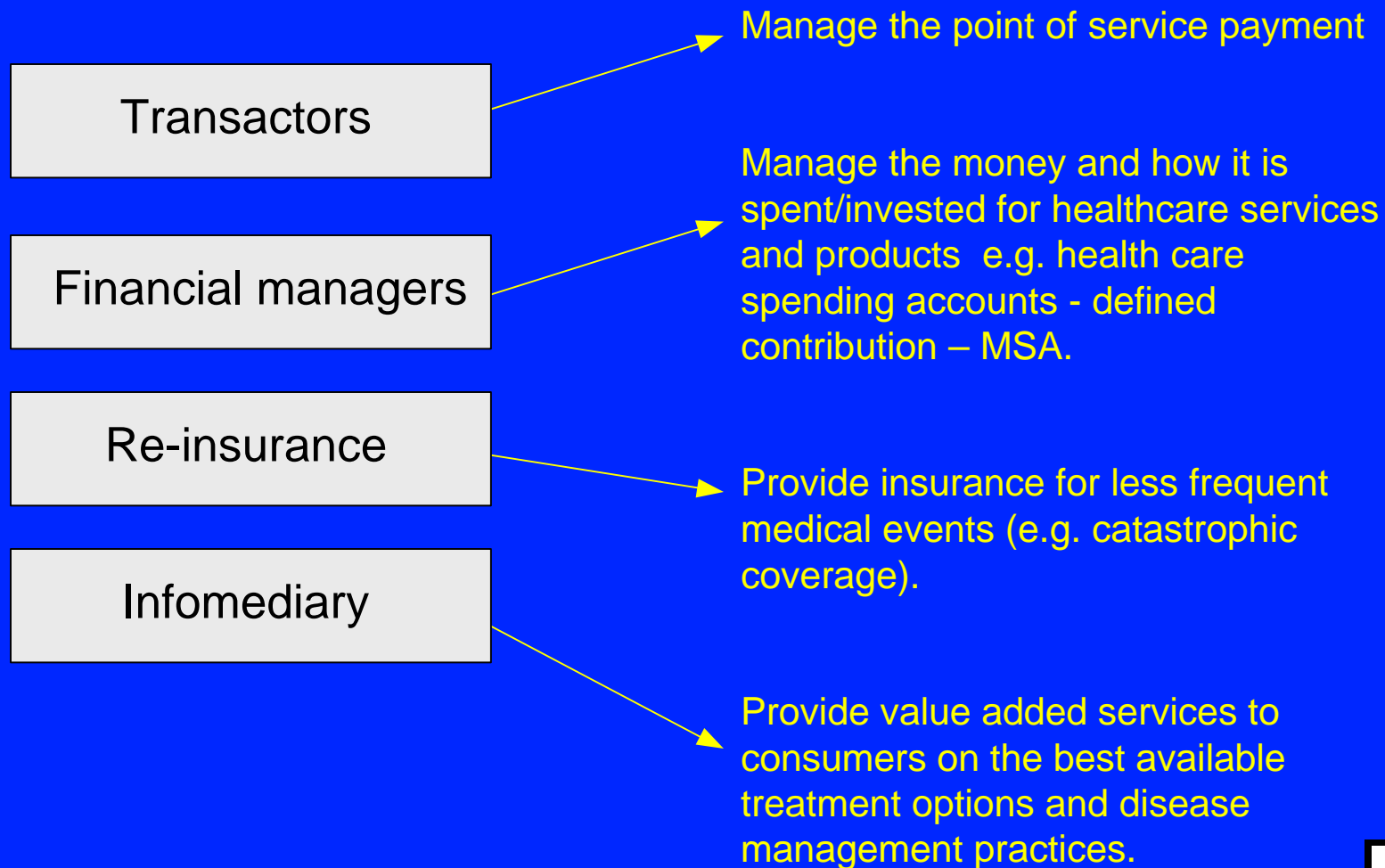


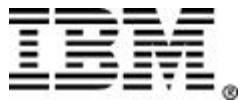
Key Issues/impact of the new model For Payors

- Focus on the consumer: health improvement and self empowerment
- Current business model depends entirely upon individuals who do not use the system:
AKA - healthy people
- The current model strips over 80% of the market out of the available target market



New Business Models for Payors





Care Giver: General Contractor Manages Healthcare Subcontractors

- **Care giver**
 - Manages healthcare services, and dollars
 - Identifies best of breed: best value & options
- **Providers & Payors**
 - Subcontracts with care giver





Care Giver: General Contractor Manages Healthcare Subcontractors

- **Defined contributions**
 - Choose plans that provide freedom of choice
- **Navigates healthcare system**
 - Fixes house provides transportation
 - Identifies providers, wellness, prevention & self care
- **First dollar coverage - value proposition**





Virtual Hospital: Information is the Primary Asset

- **Separate diagnosis, treatment & after care**
 - Hospital not bound by physical walls - reach extended
 - Partnerships are valuable assets - build virtual communities
 - Deliver care at customer's location - self care & prevention

- **The type of care changes**
 - Prevention & self care replace repair & fix
 - Care moves from inpatient to extended reach

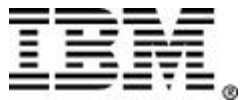
- **The right care at the right location**
 - Inpatient - outpatient - extended reach



Forrester Observations

- **Genomics dominates healthcare new products & services**
- **Cost-shifting to consumer**
- **Consumer self-direction: information**
- **Prevention & self care: alerted years before**
- **Health advocate: general counsel**
- **Consumers accept genetics: wary of privacy**

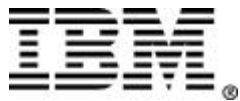




Personalized Medicine

- Financial & legal firms will enter health planning field
- Diagnostic markets will expand - early in disease cycle
- Markets grow to include the susceptible and the ill
- Pharmacy sales soar: high costs & micro-markets
- Doctors become “general counsels” and master genomics
- Hospitals partner or compete with financial groups & law firms for roles as general counsel
- e-Communities form as people ponder genomic issues



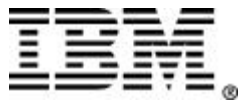


Wireless Doctors

- 1% Use computerized records
- 13% use e-mail (personal use)
- 15% use palm pilots
- 85% use cell phones
- User obvious
- PDA (Personal Data Assistant)



e-business



The Killer Application

Transcription Services: Continuous Speech Recognition

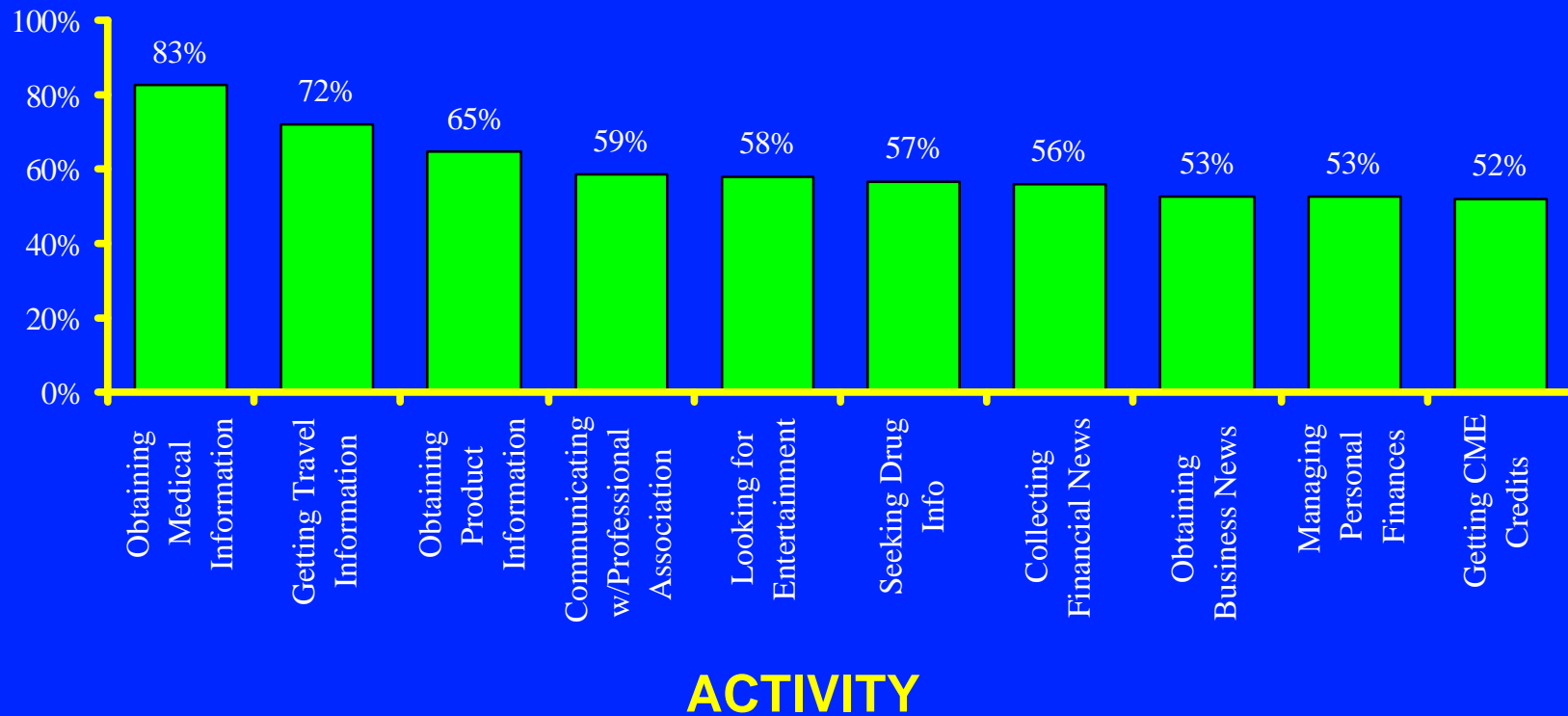
- Saves doctor most precious asset: time
- We are already paying for it
- Gives doctor ability to work from home
- Creates relationship between hospital & doctor
- Ability to market that relationship



e-business



How Physicians are Using the Internet

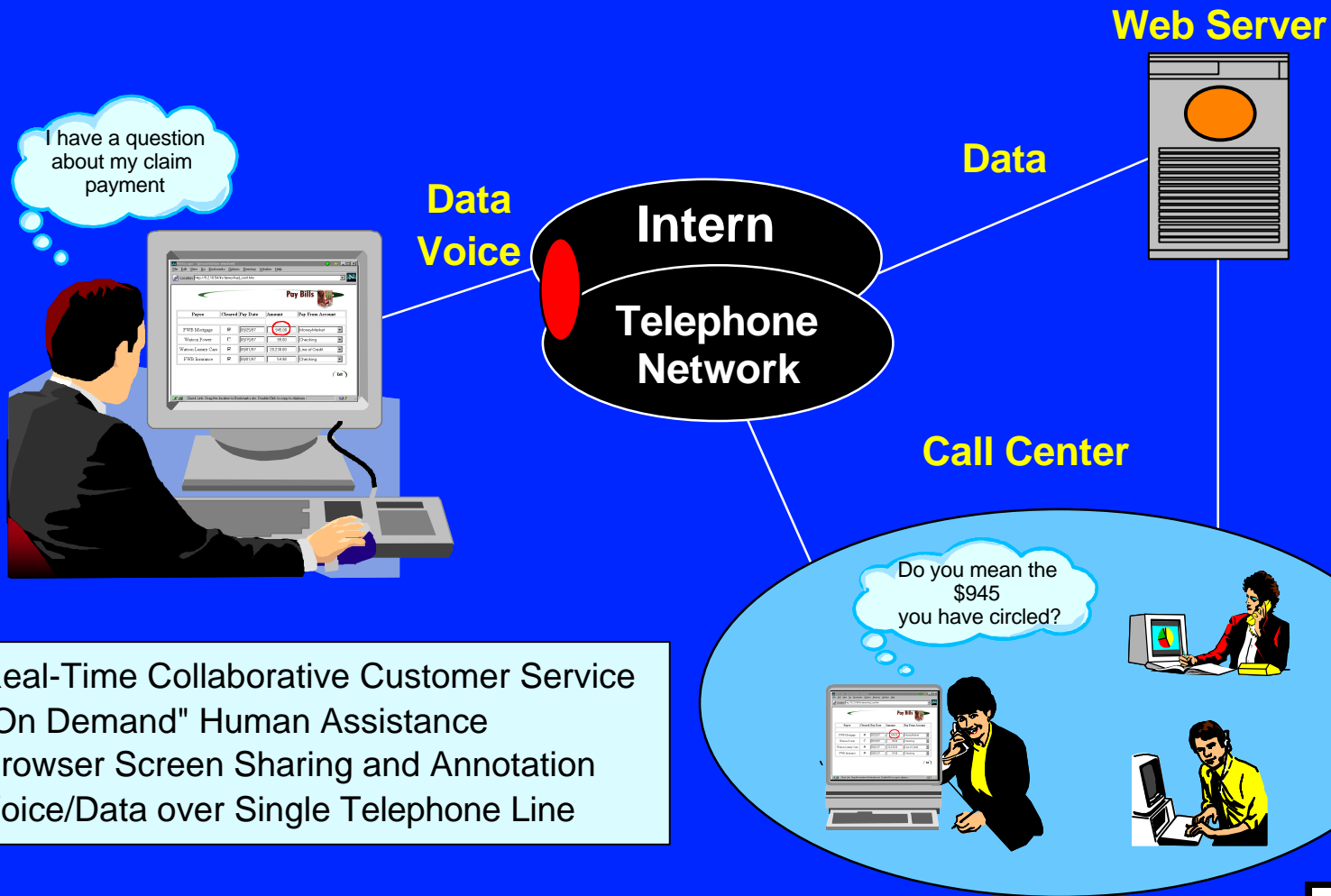


Source: American Medical Association survey; data based on telephone interviews with 1905 randomly selected physicians, 20% of whom reported using the Internet





The other Killer Application: Collaborative Customer Service



- Real-Time Collaborative Customer Service
- "On Demand" Human Assistance
- Browser Screen Sharing and Annotation
- Voice/Data over Single Telephone Line



Lowering Barriers to e-Business in Healthcare

- **Security: security solutions ease liability concerns**
- **Standards: HIPAA standards reduce fragmentation**
- **Cost: Application Service Providers (ASP) reduce cost**



e-business



The Strategic Future of Healthcare





HIPAA Overview

- **Federal Health Insurance Portability and Accountability Act of 1996 creates health information standards**
 - Transactions
 - Security
 - Privacy
 - Eventual standards for an electronic medical record
- **Major healthcare industry shift to automation**
 - Similar to banking
- **Transaction compliance deadline 10/02**





e-Health: Better, Faster, Cheaper

- **Standardization**
- **Reliability and security**
- **One-time infrastructure**
- **Strategic one-time investment**
- **Trusted environment**
- **Enhanced accountability**



e-business



Getting Value from HIPAA

HIPAA is not a sunk cost like Y-2K

- It is much more than remediation of legacy systems
- It is a vehicle to create new systems and capabilities



e-business



Adding Value from HIPAA

HIPAA improves health care by providing

- **Reliable, timely and accessible data**
- **In a secure and trusted environment**
- **At lower cost**





HIPAA Adds Value: The Basics

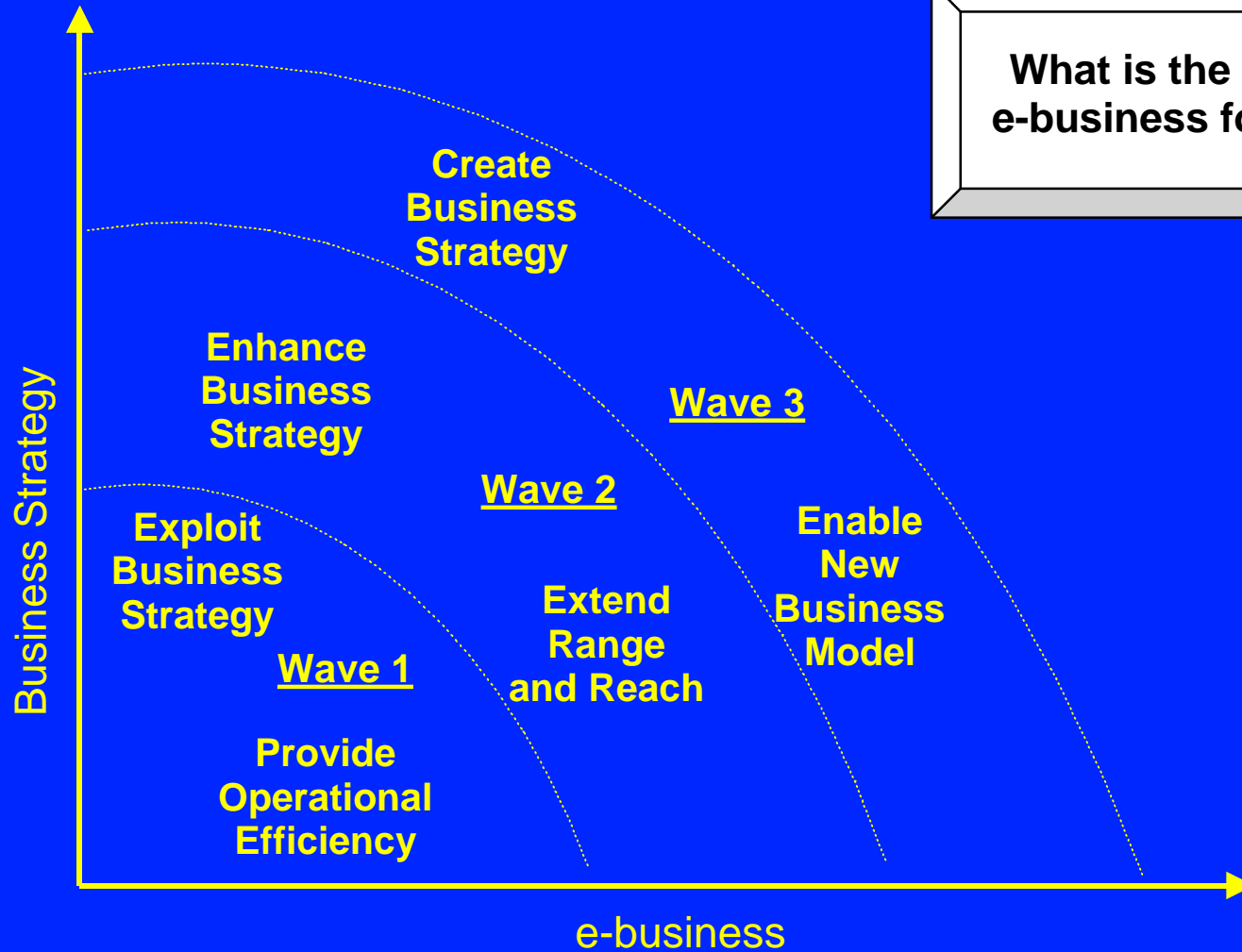
- **Transaction standards and EDI**
- **Security and privacy measures**
- **Reduced liability for**
- **Single system of record improves medical care**
- **A records database provides new capabilities**





The e-Business Value Propositions

What is the role of e-business for you?

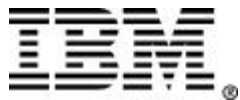




Wave 1 - Exploit Business Strategy Quick Fixes

- Payor: eligibility/claims processing and inquires, email
- Provider: appointments, content, email, Rx
- Value: improved service, reduced administration, lower systems costs, nationally standards, real-time data capture, data integrity, patient trust
- HIPAA value: standard data across trading partners and customers, data integrity, reduced vulnerability with Government endorsement, customer trust = increased usage





Wave 2 - Enhance Business Strategy Improve Current Business Models

- Payor: On-line member enrollment and claims
- Provider: On-line billing, electronic medical record, streamlined lab ordering and reporting, pharmacy error protection, easier self-care monitoring, tele-medicine
- Value: clean claims, further reduced administration, improved service, fewer adverse drug reactions and medical errors, reduced fraud and abuse, wider use of evidence-based medicine
- HIPAA value: clean claims/bills, enhanced data base capability, greater accuracy of patient/member data yields greater returns





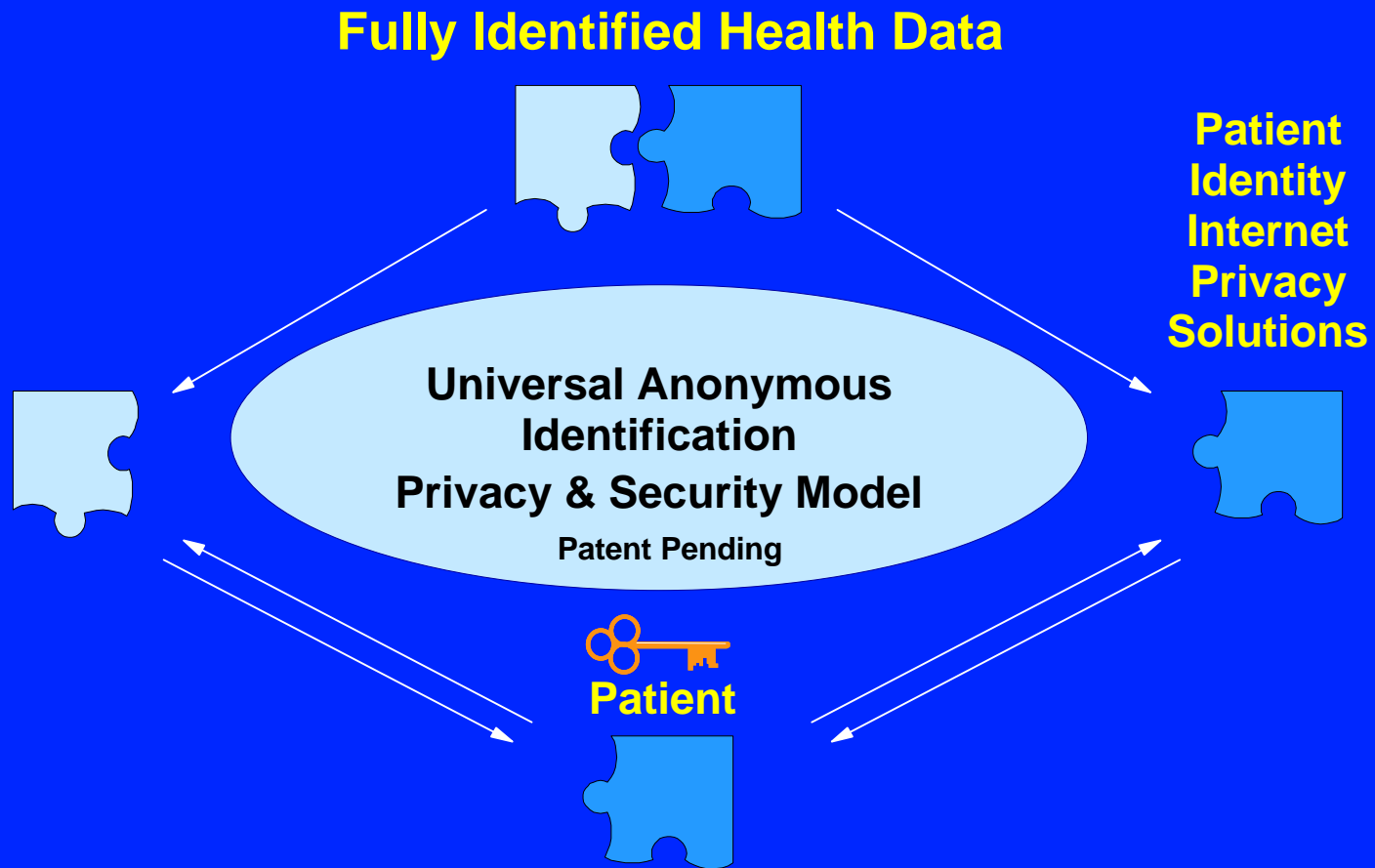
Wave 3 - Create Business Strategy New Business Models

- Payor: Financial management for healthcare, anonymous self-care management (PPI)
- Provider: Care givers distinct from providers, virtual hospitals, on-line group care
- Value: New revenue opportunities and extended reach
- HIPAA value: Enables infrastructure for new models





Internet Privacy Solutions Privacy from Anonymity

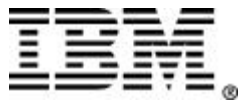




HIPAA: Prevents us From Repeating Mistakes of the Past

- **Build systems with different platforms**
- **Use different standards for different systems**
- **Handle functions internally that can be better handled externally and at less cost**
- **Develop proprietary software that cannot easily interface to your external partners**
- **Focus your time on technical issues and not on your core competencies and core business functions**



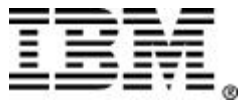


Blue Cross/Blue Shield of Rhode Island

- **HIPAA Assessment: Initial & Detailed Follow On**
- **Initiating Solution Design**
- **Broad Business Perspective: e-Business & HIPAA**



e-business



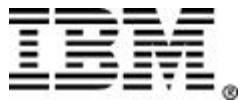
NASCO

- **HIPAA Assessment: Initial & Detailed**
- **Solution Design & Implementation**
- **Decision Based on combining e-Business & HIPAA**

IBM seen as leader



e-business

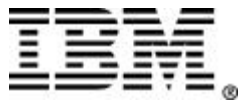


Personal Path Systems

- **HIPAA: Early services support**
- **Focus on Security and Privacy**
- **Define Phase III e-Business Offering**



e-business



SUMMARY

- **E-Line: Where the industry leaders reside**
- **Consumerism: The driving force**
- **New Business Models and Key Applications**
- **HIPAA: Value not Cost**
- **Leverage Current Business Strategy**
- **Enhance Business Strategy: Business Transformation**
- **Create New Business Strategy**
- **HIPAA: Enables e-Business**





Other Key Factors

- **Meeting Standards: NEON**
Compliance Maps verify X12 Standards
- **Integrating disparate systems: MQSI**
Leveraging Assets - Avoiding Total Rebuild
- **Protecting Data/Security: Tivoli**
Applications and Systems

