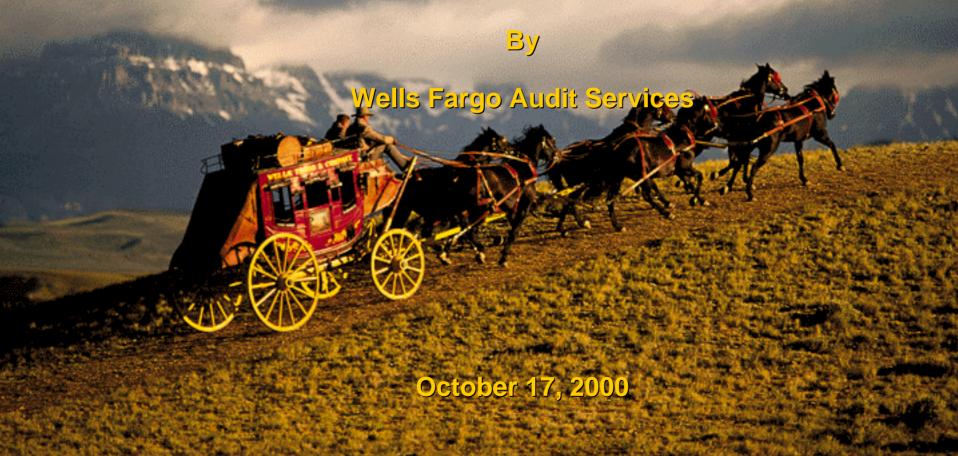


E-Commerce at Wells Fargo

SF JJA/JSACA Presentation



Discussion Topics

E-Commerce at Wells Fargo - Our Story

E-Commerce Risks

General Conclusions

Q&A

Afternoon Session

9/99 Discussion With Wells Fargo's CTO

- Wake Up Call!
- Call To Arms!

E-Commerce Activities At Wells Fargo

Recognized as a Leader for Growth and Innovation

- > 1.7 Million Online Customers (1999) more than double since 1998
- > wellsfargo.com
- New Products and Services (Internet)
- > Decentralized Responsibility for EC Initiatives

E-Commerce is Changing the Competitive Landscape

COMPETITORS:

Non-Traditional Financial Institutions

Portals

Non-bank companies

Dot-Com's

New dominators



TECHNOLOGY:

Rapid changes

New channels

Evolving standards

Increasing ubiquity





CUSTOMERS:

Mobile

Diverse geographies

Price sensitive

Anytime, anywhere

One-stop shopping



THREATS:

Intrusions

Disruptions

Regulations

Fraud

Aggregation

Moving At Internet Speed

EC Activity Is Growing At A Rapid Pace

Business And Technology Risk Profiles Are Changing

Audit's Reaction/Response

Do We Have Answers To These Basic Questions?

- What is E-Commerce? How is it Defined?
- What E-Commerce Activities are Occurring Within Wells Fargo, and Where?
- What Risks are Associated With These Activities?

- Do We Have Adequate Audit Coverage and Are We Doing Enough?
 - Project Basis Auditing
 - > Some Recurring Operational Audits
 - > Silo Approach
- What Is The Best Approach To Audit These Activities?

Launched An Enterprise Wide E-Commerce Project

Project Objectives

- Provide Executive Management with an enterprise level assessment of the processes in place to allow E-Commerce objectives to be met
- Assist the organization in evolving its controls as the E-Commerce business model changes and E-Commerce needs evolve
- Provide comparison to good industry practices
- Develop an approach for auditing E-Commerce activities within Wells Fargo

E-Commerce Project

Project Team

- Business and Technology Auditors
 - "A" Team Players
 - Experienced
 - Understands the Business
- Partnership with KPMG
- Fully Dedicated Resources

Project Approach

3 Phases

Phase I - Planning & Strategic Analysis

- Gather Wells Fargo Specific Information Pertaining To:
 - > Business Objectives and Strategy
 - > E-Commerce Strategic Management
 - > E-Commerce Initiatives
 - > Organization and Responsibilities for
 - ✓ Program Management
 - ✓ Application Management
 - √ Technical Infrastructure
 - √ Supporting Processes

Phase I - Outcome

"E-Commerce is the use of <u>enabling technologies</u> that extend the <u>core business activities</u> of the enterprise into a <u>virtual electronic community</u> that is <u>shared</u> with customers, prospects, suppliers, business partners and employees." (Audit definition)

- Understanding of E-Commerce activities and initiatives
- Focus on Internet transactions (B2B, B2C, and C2C)
- Accumulation of data for Phase II risk assessment

Phase II - Enterprise Level Business Risk Assessment

- Identify important control objectives
- Assess the processes across the enterprise for meeting the control objectives
- Prioritize risks and compare processes to internal and external Best Practices
- Make recommendations for strategic and tactical remediation efforts

Phase II - Outcome

- Over 80 formal interviews conducted with all key lines of business
- Formal risk assessments completed at enterprise level
- Complete understanding of E-Commerce activities, initiatives, and risks
- Helped educate Executive Management and A&E Committee
 - > E-Commerce infrastructure within Wells Fargo
 - Helped take the "Mystique" out of E-Commerce and the Internet
 - Risks associated with E-Commerce

Phase II - Outcome

Reputation / Brand Risk

Control Objectives

- Strategic Management
- Program Management
- · Technical Infrastructure

- · Application and Functionality Architecture
- Supporting Processes

Strategic:

- Effectiveness of planning process [Time to Market]
- Linkage with other strategic and business plans
- Adequacy of expertise and resources

[Intellectual Property]

Credit:

- New demographics
- New geographies
- Changing customer relations
- Transitory customer
- New network of alliances
- · Instant Credit Decisioning

Transaction:

- Non-credit risk
- Transaction integrity
- Customer authentication [Digital Certificates]
- · System capacity & availability
- Monitoring and audit
- Backup and recovery
- Fraud risk

Compliance:

- Banking regulations
- Consumer and banking legislation
- Contracts with suppliers, outsourcers and customers
- Privacy [Aggregation]
- Legal

Phase II - Outcome

Additional new risks include:

- Missing non-traditional changes in the competitive landscape
- Keeping pace with the number and/or size of identified changes
- Assuming more risk than planned in attempting to respond quickly
- Tarnishing reputation/brand due to missteps in the marketplace

Phase II - Outcome

- Results formally presented to Executive Management and A&E Committee
 - Forward thinking recommendations looking out the front window
 - Obtain Management "Buy-In"
 - What's Working and What's Not
 - > Value Added

Phase II - Outcome

EC Life Cycle

Informational Transactional New products Value Chains Next Evolution (traditional products) and services

Challenges and opportunities - areas to focus on

- Strategic Management
- Risk Management
 - ✓ Balance between speed to market and effective controls
 - ✓ Technology and security
- Communication regarding E-Commerce roles and responsibilities
- Due Diligence Process
- Contract/Vendor Management
- Intranet Processes

Phase III - Implementation Objectives

 Assist management in evolving controls related to E-Commerce technology and business processes

 Determine appropriate tools and approach for maintaining on-going value-added review of E-Commerce activities by Audit

Phase III - Outcome

Established an E-Business Audit Team

Full Time Focus to

- Proactively identify emerging E-Commerce risks
- Establish controls to minimize exposure and potential impacts
- Interface with lines of business
- Provide proactive value added services

Business and Technology Auditors

- > Project team members ("A" team, experienced)
- Think "Outside the Box" Non-traditional audit approach

Conclusion - Where We Are Going

Project Results - Enterprise Level

Well received by management - proactive and value added

 Forward thinking - next level of strategic and risk management processes

 Assist Wells Fargo in maintaining its leadership role in developing, deploying and delivering secure and reliable E-Commerce products and services

Conclusion - Where We Are Going

Project Results - Audit Level

- New E-Business Audit Group well received
 - ✓ Need to deliver on our mission
 - Consultative versus traditional audit approach
 - ✓ Proactive and Integrated
 - ✓ Fully dedicated to E-Commerce risks at enterprise level
- Partnership with Management
- **E-Commerce Resource Center of Excellence**
 - ✓ Knowledge
 - ✓ Risk Management
 - ✓ Enterprise Level View

Closing Remarks

If your organization is actively involved with E-Commerce and you don't know or fully understand the associated risks

You Are Behind the 8-Ball!
It Isn't Going to Slow Down!
Need to Address These Risks Now!

If you are on top of these risks

Congratulations

E-Commerce is as much about business risks as technology risks

Questions??

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