

# The Impact of Tablets in Financial Services

Webinar
June 8, 2011

Sponsored by:





#### **Moderator**



**Dan Liliedahl**, Chief Technology Officer TandemSeven



#### **Panelists**



**Brent C. Haley**, Managing Director, Investor Services Distributed Systems BNY Mellon Asset Servicing





Thomas Poppey, COO, Global Securities Lending Brown Brothers Harriman & Co.





**Joe Ruck**, Chief Executive Officer BoardVantage





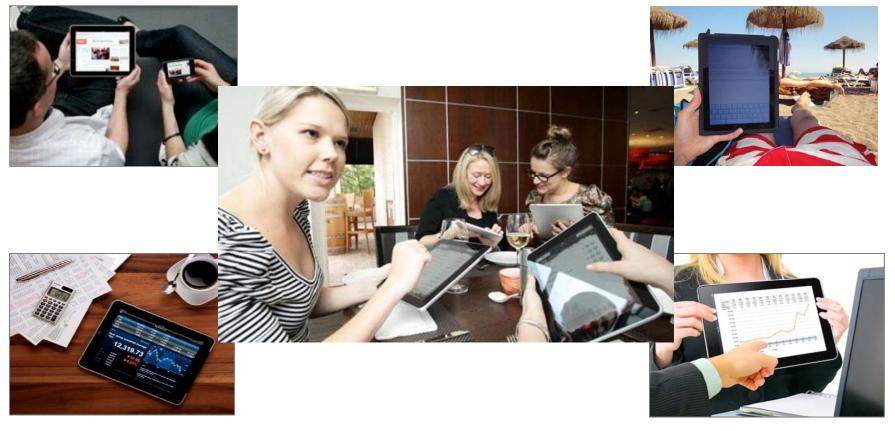






# **Productivity Effect**







User Experience/
Persona Modeling



"Know thy user."







# **Enterprise Mobility Strategy**



- Mobile device market segmentation
  - What are your target devices?
  - Do you control the hardware?
- Development platform approach
  - Narrowly targeted native development (e.g., Objective C on iOS)
  - Widely targeted rich server-side applications (e..g., HTML5 and WebKit)
  - Application management—upgrades/maintenance
- Mobile Device Security Considerations
  - Offline data retention













#### Native Mobile Applications

- Predominant Application Paradigm
- Delivered Via App Stores
- •OS Specific Languages/Frameworks
- Higher Development Costs
- Application Updates Primarily User Driven
- Best Device Interaction/Performance

#### **Hybrid Applications**

Native Applications that interact over web via services or rendered panels

HTML 5 Rendered locally on the device

Web Applications with presence on app stores; additional access to device capabilities via native technologies

# **Mobile Application Development Continuum**

#### Mobile Web Applications

- Quickly evolving technologies (HTML 5)
- Centralized Maintenance/Updates
- Server/Company controlled security
- •Lower cost, ubiquitous technologies
- Able to leverage existing investment in web based applications







# Mobile Application Security



- Device security insufficient
  - Data at rest on device at risk
  - Resident application code at risk
- Phishing/cross site scripting easier
- Extension of existing security approach
  - Multifactor Authentication
  - Secure Protocols





# Mobile Web Apps - HTML 5



### Highlights

- Seeks to provide an application foundation vs markup focused
- Improved Structure Elements
- Improved Error Detection/Handling
- Canvas (Graphics Rendering via Markup)
  - Markup based rendering
  - Scriptable
- Touch Enabled
- Direct embedding of audio/video
- Offline Storage
- Geo-location





# Case Study











#### BBH clients receive:

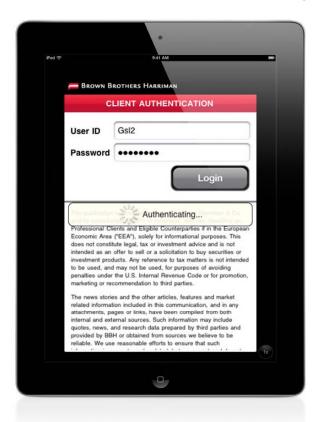
- Immediate, encrypted access to program specifics
- Regular market updates, including information about what is driving a change in borrower demand and how it could affect your securities lending revenue
- Access to daily earnings, outstanding loan balances and loan distribution by borrower
- Ability to search for information about specific securities



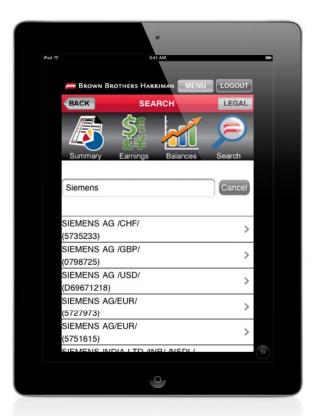












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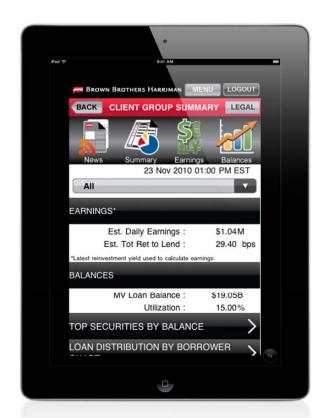


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# Case Study

iPad in the Boardroom



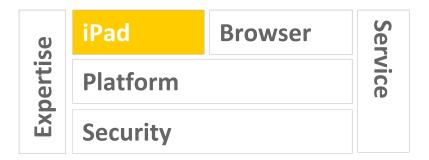
#### BoardVantage

- Marquee provider of board portals
- Browser and iPad
- 400+ customers, F-500 centric
- Pure play board portal
- Boards and Leadership Team
- Menlo Park, CA, offices around US

#### Technology

- Frontend
  - iPad for directors
  - Toolkit for admin
- Backend
  - Security
  - Platform



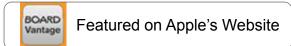




### iPad for Board Work



- Crossed a usability threshold
  - Device
  - Арр
- Meeting experience
  - Birdseye and drilldown views
  - In collaboration with Apple
- Benefits
  - Superior to a browser
  - Superior to print
  - "Third Device"







## Securing the iPad Offline



#### Offline Access

- Prep for a meeting while in transit
- At a remote location (e.g. vacation)

#### Briefcase

- Secure offline document access
- Delete content and notes
- Remote purge
- Eliminates vulnerability







### Browser and iPad Coexistence

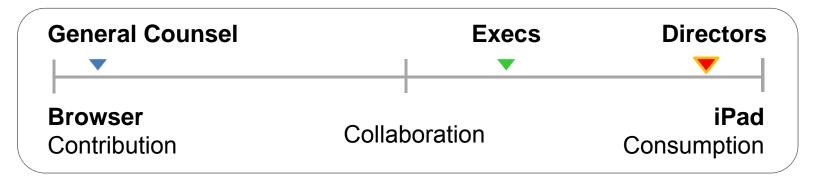


#### Directors

- Configuration to highlight essentials
- Presentation graphics for enrichment
- iPad and Browser

#### General Counsel Office

- Continuity with the desktop experience
- Integration with desktop tools
- Browser





### Presentation - iPad

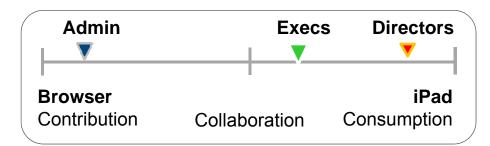


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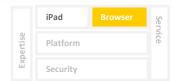
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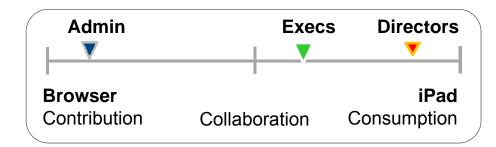




### Desktop Equivalent - Browser



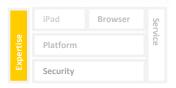
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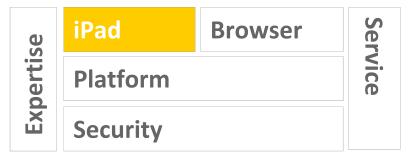
### Direction



- Evolving Threat Environment
- Changing Nature of Board Work >
- Consumerization of Software

- > Ongoing Emphasis on Security
  - **High-Caliber Business Tools**

Social Media, New Devices



NextGen Platform





### A&D

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