Implementation and Benefits of a Web-Based Campus Facilities Space Accounting and Capital Planning System
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Title slide photos, from top to bottom:

a. Davis boasts more bicycles per capita than any other community in the United States and more than 50 miles of bike paths. Bikes serve as a main mode of transportation for many of UC Davis' approximately 30,000 students.

b. The UC Davis research vessel John Le Conte is a moving laboratory for scientists studying ways to keep Lake Tahoe blue.

c. Veterinarians discuss a cat's care at the UC Davis Veterinary Medicine Teaching Hospital small-animal clinic.

d. The Bodega Marine Reserve offers students and researchers opportunities for marine and coastal field studies.

e. Andrew Walker, professor of viticulture and enology, points out differences in red-wine grape varieties to students. Walker is an internationally known grape geneticist who studies the genetic basis of vine resistance to soil-borne pests.

f. Gov. Arnold Schwarzenegger refuels a hydrogen-powered fuel cell car at UC Davis' new hydrogen fueling station -- the first publicly accessible station on California's Hydrogen Highway.
Implementation and Benefits of a Web-Based Campus Facilities Space Accounting and Capital Planning System

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Introductions
Challenges with Facilities Data at UC Davis

- Space inventory data management
  - Timeliness (addition of new buildings)
  - Submitted by paper
  - Key-entered by central office
- CAD data management
  - Multiple drafting shops
  - Reconciliation with other data base
- GIS data management
  - Multiple mapping programs
  - Reconciliation with other data sets
- Emergency Planning
  - Incomplete occupancy data
Challenges (continued)

• Facilities Management
  – Independent building numbering scheme
  – Expense data disconnect
• Leasing
  – Two databases with inconsistent expense and revenue data
  – Incomplete expense data
• Multiple perspectives across the enterprise
  – All databases are solid and well-managed for many years
  – Based on various responsibilities and territories
  – None reflect 100% of the enterprise
  – Ambiguous and vague nomenclature
  – Assignable or not, owned or not, capitalized or not …
Engineering of a Solution
Learn Your Environment

• Form an analysis team of functional business and technical staff
• Involve the right folks for interviews
• What business processes and policies are in place?
• Chart processes with timelines
  – New construction
  – Major capital improvements
  – Minor capital improvements
  – Space reassignments
• Identify critical sequences and bottlenecks
• Review what works and what does not
• Define improvement goals
• Communicate your findings
Improvement Goals at UC Davis

- Adopt a system to act as a conduit for integration of existing databases with flexibility to reconcile over time
- Interface passively with multiple drafting shops
- Automated reconciliation of CAD floor plan drawings with relational database records
- Include spatial details and classification of non-assignable area
- Define new buildings and rooms prior to occupancy
- Integration with campus financial system workflow
- Integration with campus single sign-on authentication
- Flexible definition of authorization groups
- Web interface using only HTML, JavaScript, and graphic files
- Server hosting options
Develop or Acquire Software?

At UC Davis, we …

• Evaluated requirements and researched available solutions
• Selected FacilitiesLink from Network Digicality
• Contacted other UC locations to discuss their experiences with their FacilitiesLink
• Negotiated contract
Implementation Planning and Execution

- Form an implementation team of functional and technical staff
- Plan your implementation in phases assuming the least risk
- Draft an implementation roadmap
- Adjust business policies and processes as needed
- Manage expectations
Implementation Phases at UC Davis

- Building and room inventory
- Floor plan reconciliation and upload
- Leasing and other property-related agreements
- Capital asset accounting
- Capital planning
- Facilities and Administration (F&A) rate justification data
- Integration of mapping databases
- Feeds to Decision Support System and Data Warehouse
Benefits Realized

- Non-disruptive integration – decentralized but coordinated
- Quick adoption and enthusiastic reaction throughout the enterprise
- Instant data availability from an integrated and up-to-date source
  - Touch-screen kiosks
  - Animated flyovers
  - Capital planning funding models
  - Leased property termination options
  - Occupancy analysis projects
  - Measurement of research expenditures per square foot
  - Emergency planning
  - Accessibility studies
  - Sustainability studies
Demonstration of UC Davis & UC Santa Cruz FacilitiesLink