Northwest Construction Consumer Council

NWCCC 2004
Seattle, Washington

DigitalSpecs

Beyond The Comfort Zone

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Executive Vice President & CIO
The McLain Group
http://www.themclaingroup.com

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Information Technology Council

International Facility Management Association

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TMG Development/Infrastructure
TMG Real Estate Technology
TMG Facility Life Cycle Management
TMG Energy

Offices

Atlanta • Hong Kong • Little Rock • Melbourne• Tampa • Toronto • San Diego

TMG
The McLain Group

Recent Clients

Travaux publics et Services gouvernementaux Canada

Public Works and Government Services Canada

Publications

abc 2000

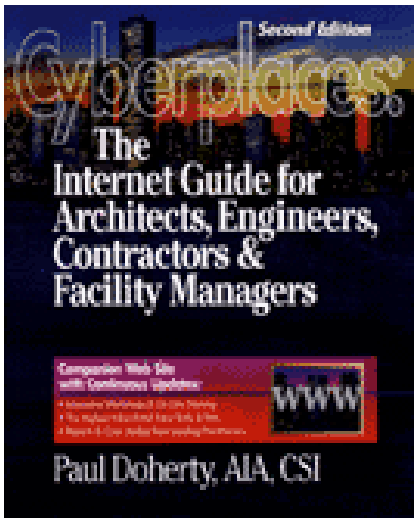
CBS MarketWatch
cbs.marketwatch.com

INFORMATIONWEEK

WSJ.com THE WALL STREET JOURNAL. ONLINE

USA TODAY

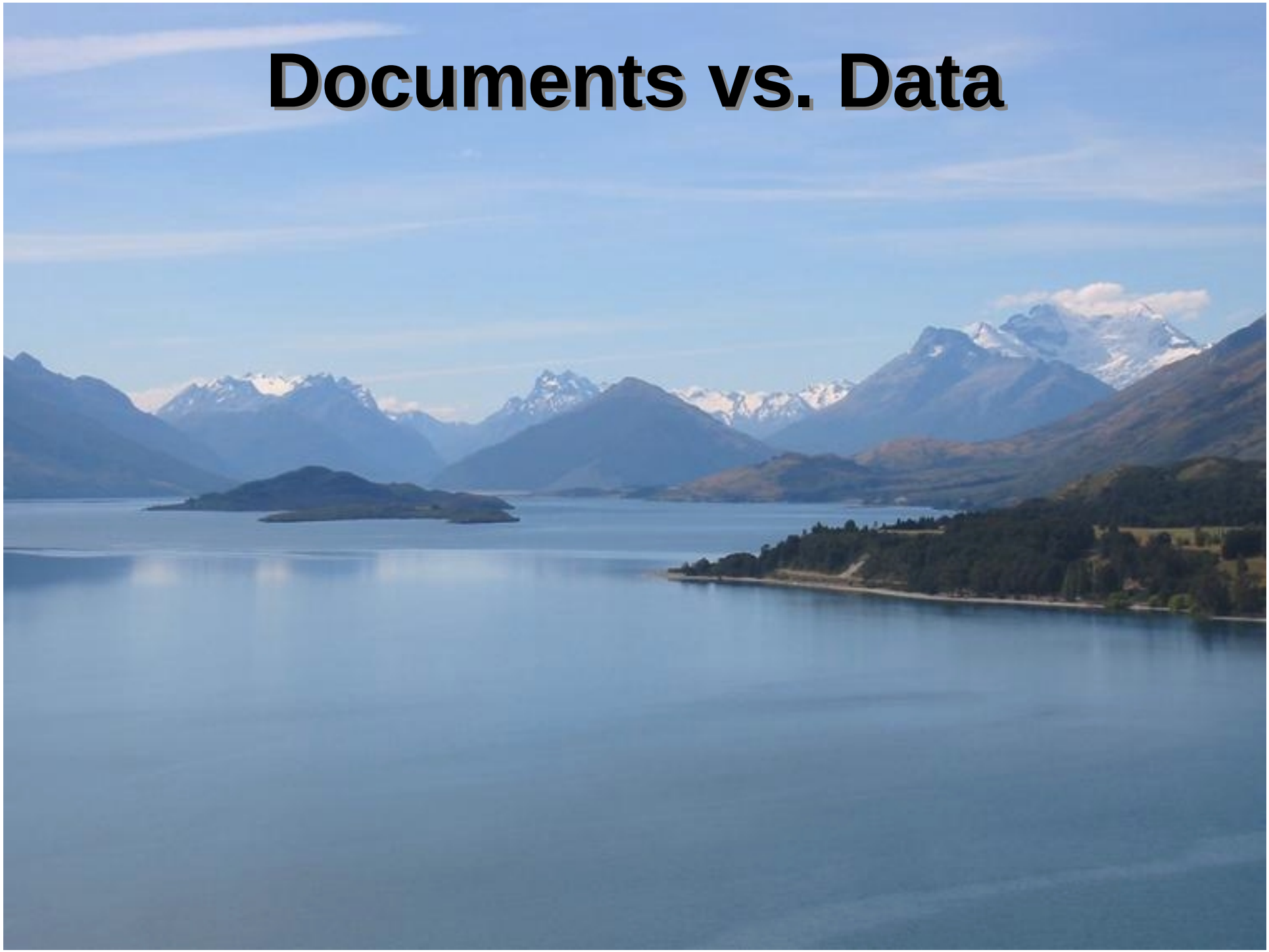
DesignIntelligence™



“It is generally much easier to kill an organization than change it substantially.”

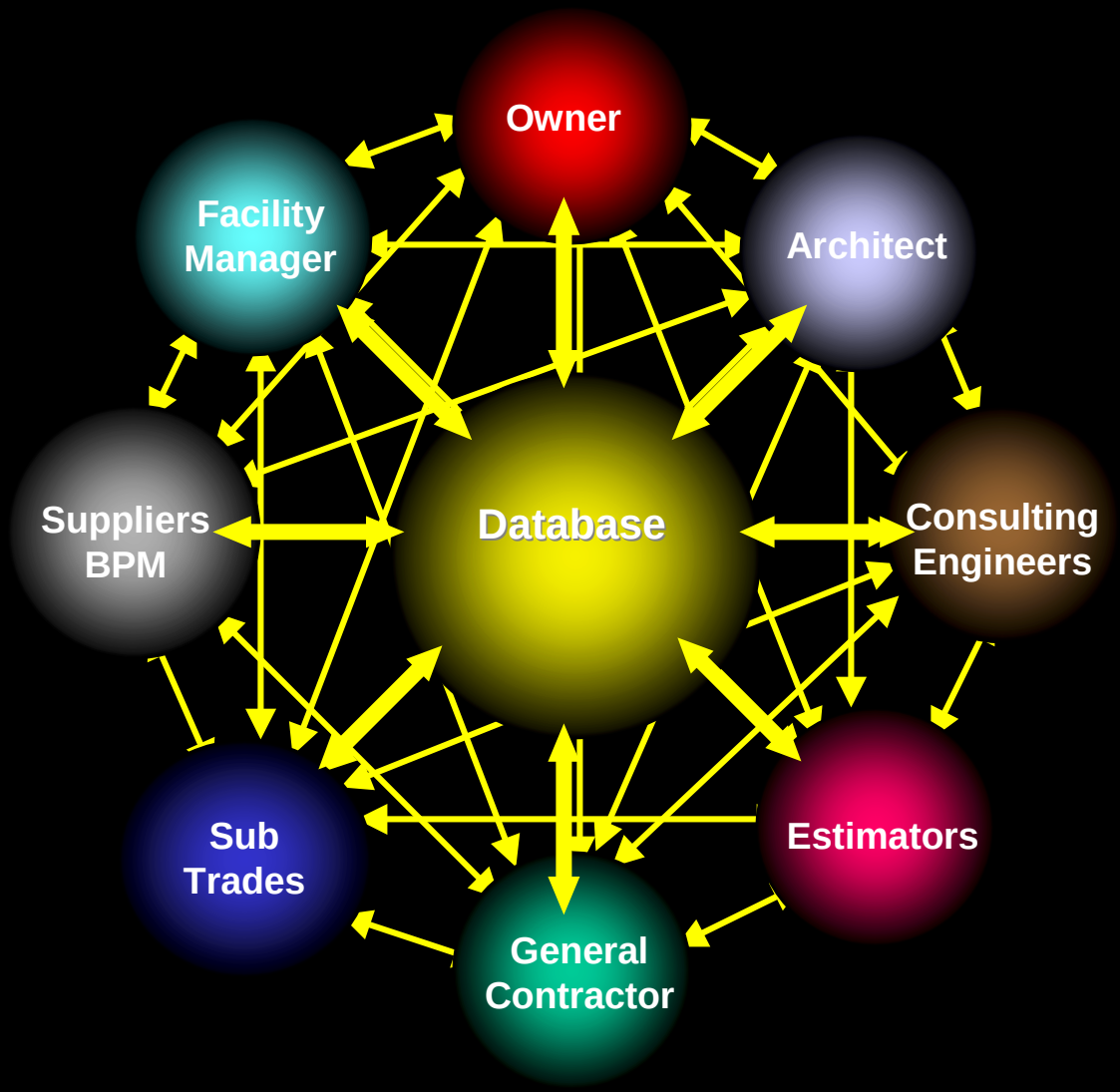
Kevin Kelly

Documents vs. Data



Integrated Data Solution

Interoperability



Information Categorization & Standards

MasterFormat

OmniClass

IAI - IFC’s

Current AEC/FM information problems

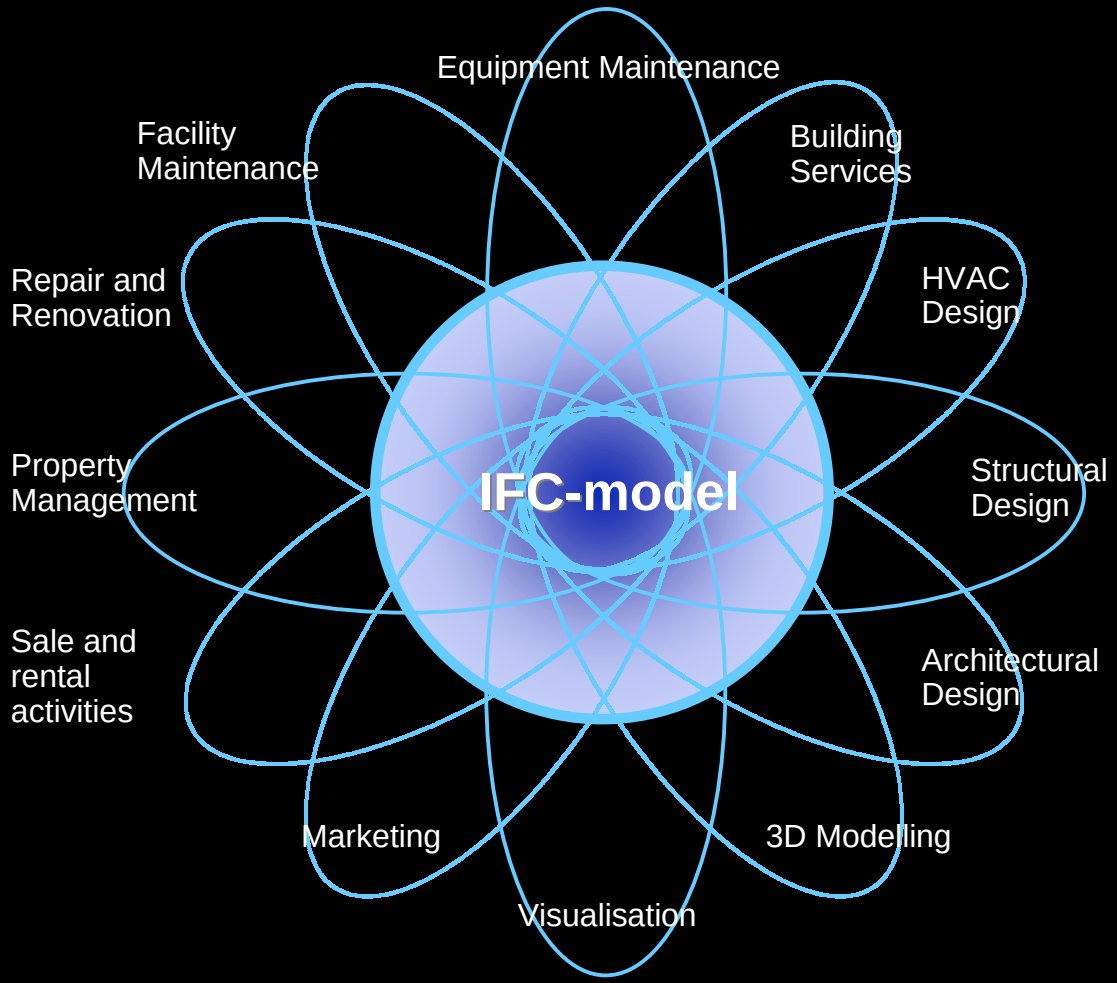
Information is:

- not in usable format
- not consistent
- not updated with systematic change and versioning management

Consequences:

- non-value adding work
  - reproduction of information in different format
  - manual document comparison and version checking
- delays
- errors and rework on site

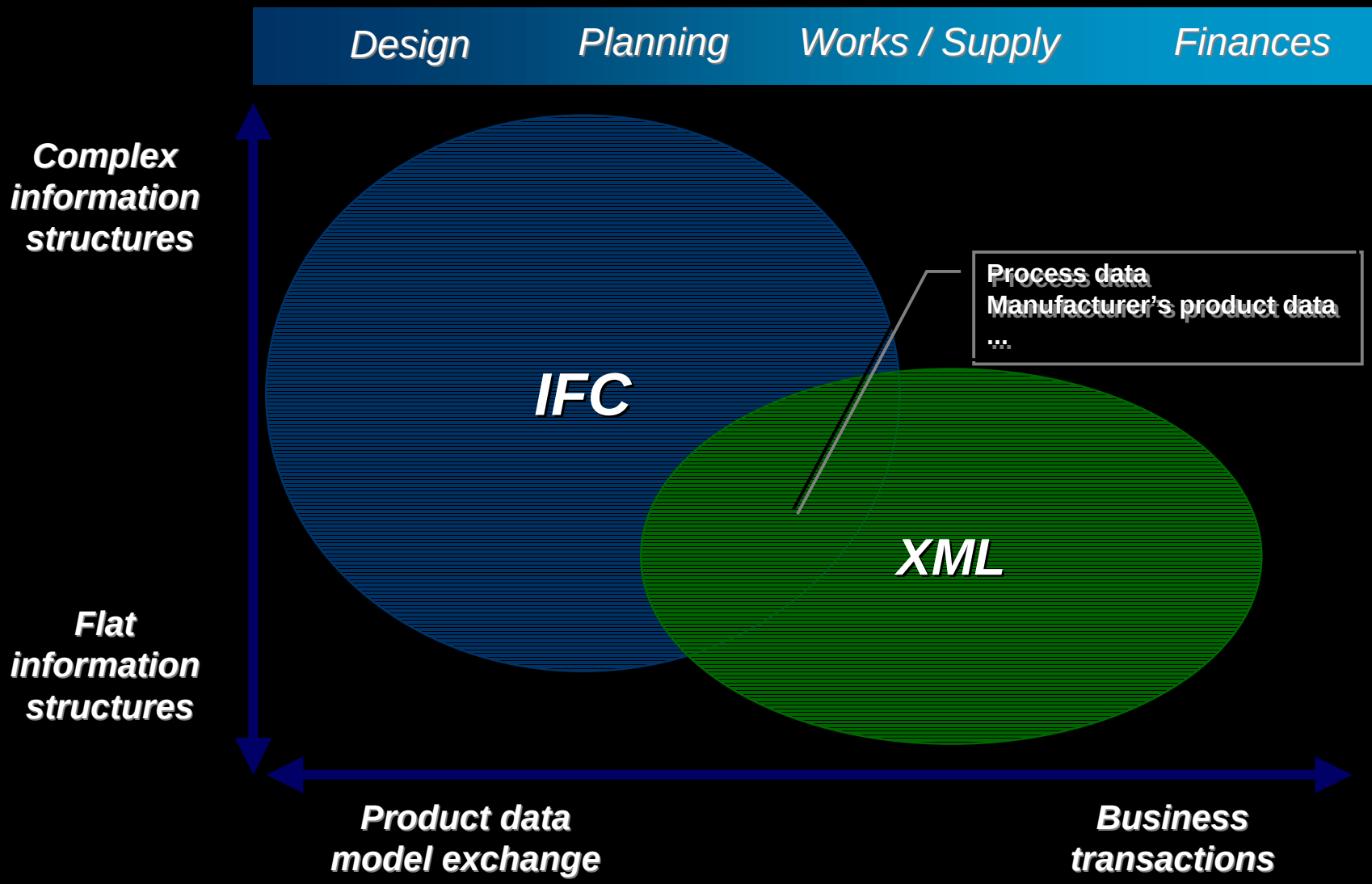
Coverage of the IFC model



Many AEC/FM activities need at least part of the common basic data

IFC does not try to standardize data structures in software applications, only the shared information

IFC and XML



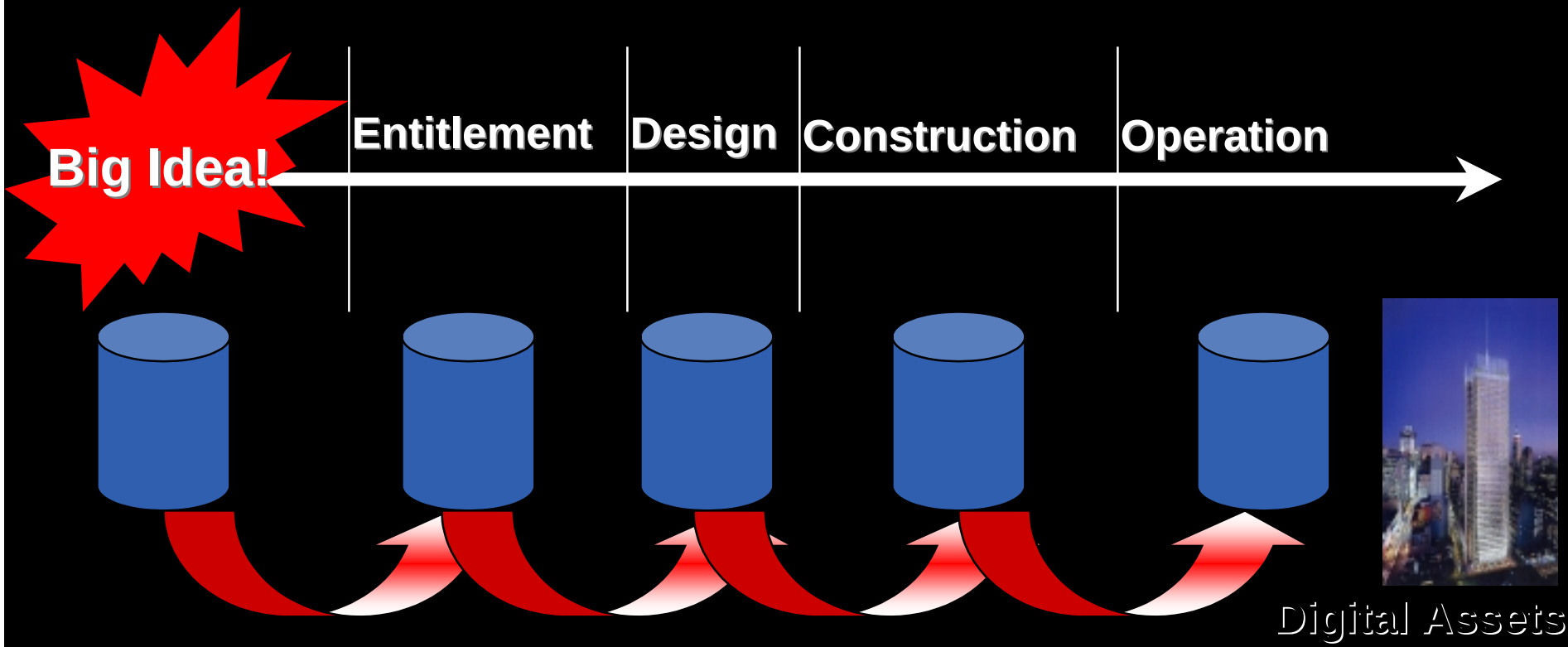
© Kari Karstila
Eurostep

Concepts Supported in the current IFCs

- Cross industry
  - –projects, buildings, building storeys, design grids, constraints (design, building codes, budgets), networks (topology), library links over Internet
- Architectural design
  - –spaces, walls, doors, windows, columns, beams, floors, roof slabs, curtain walls, roofs, stairs, ramps, restrooms, elevators, escalators, cabinets, counters, accessories
- HVAC design
  - –HVAC equipment (all kinds), ducting and piping systems, thermal load calculations
- Construction Management
  - –costs & cost schedules (for quantities and cost estimating), work tasks & work groups (for work planning & scheduling)
- Facilities management
  - –furniture, office equipment, occupants, panel systems, asset information, work orders & move plans (for occupancy planning / move management)
- Building codes
  - –energy code checking, occupant escape from fire, handicapped access to buildings

Object Modeling

Capital Improvement Cycle



scream!point
multimedia for real estate

WTC Redevelopment

scream!point
multimedia for real estate

Hudson Yards, New York City

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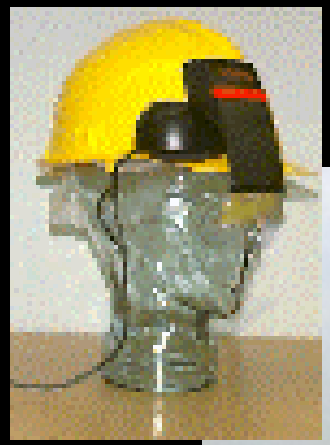
multimedia for real estate

3D Components

Tian An Centre, Shanghai

Wireless / Mobile



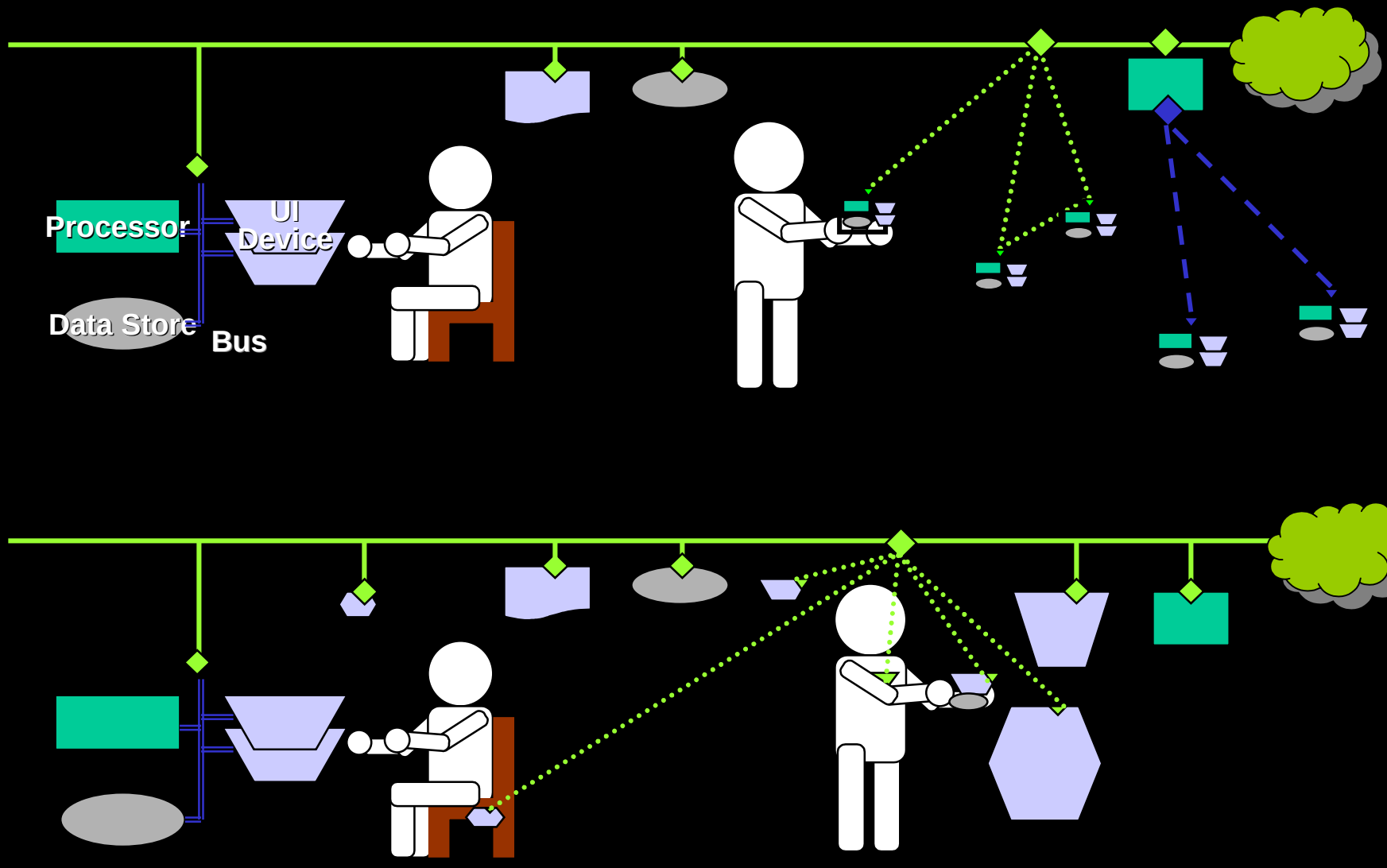
L226
NJN

Mobile Devices

- Cell Phones
- PDA
- Beeper
- Hybrids
- Smart Cards
- Clothes
- Jewelry

Advanced Integration

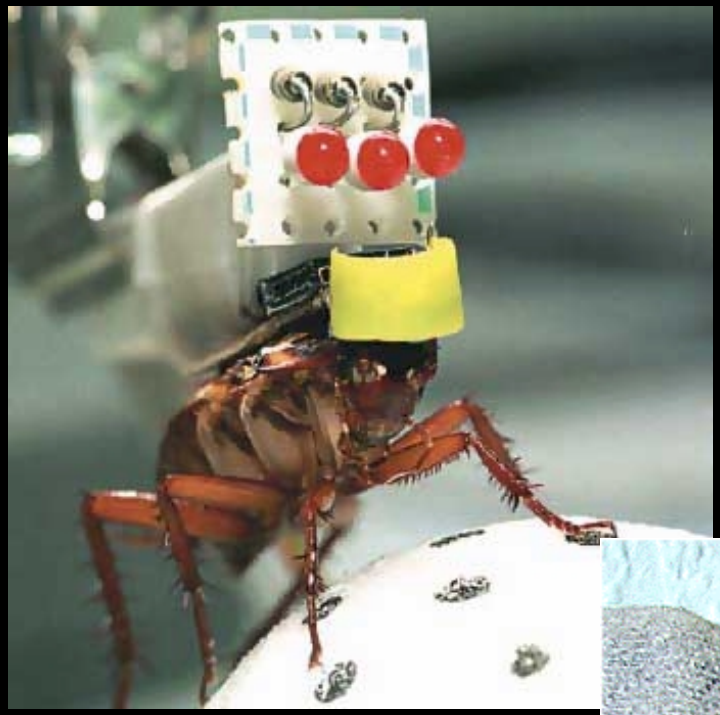
Beyond Mobile Computing



Highly Integrated Computing

Dial-a-Coke
手機易買『樂』
陽光

Hong Kong – Octopus Card



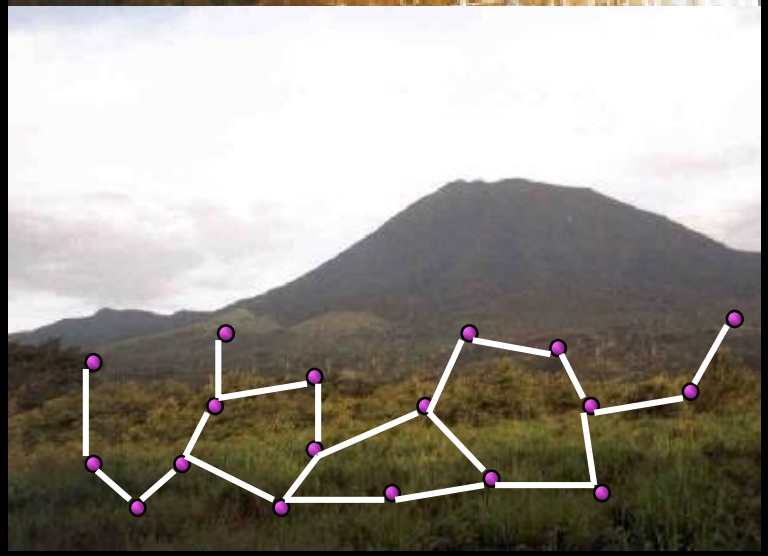
Matsucom
GLOBALCOM, Inc.
onHand
ENTER
PubCrawl Fix OK
Camb. Arms 802m S
Clyde Arms 1282m S
Vittoria 2064m S
White Bear 2251m S
EL
FILER/TIME
Matsucom
MENU

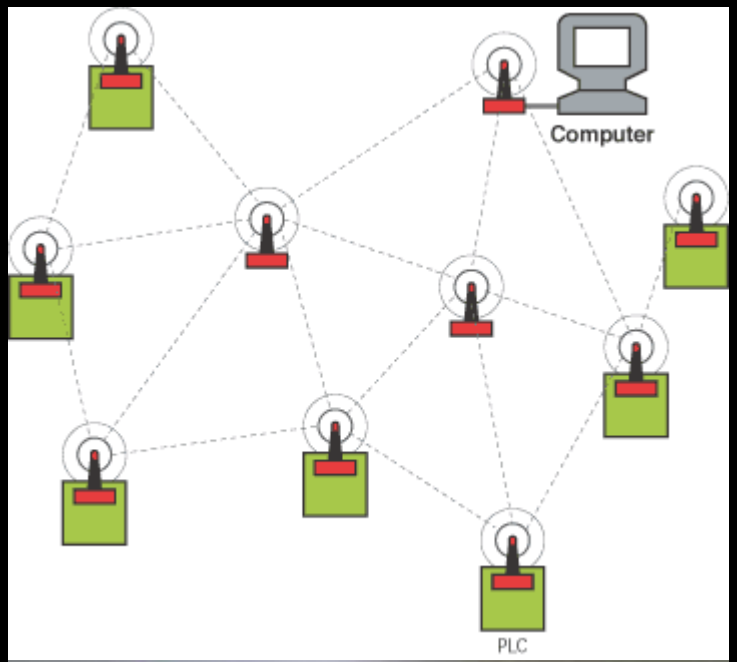
The Department of Homeland Security

President George W. Bush

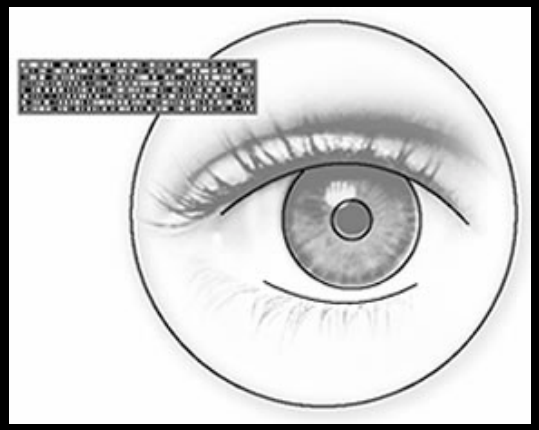
June 2002

Wireless Mesh Networks

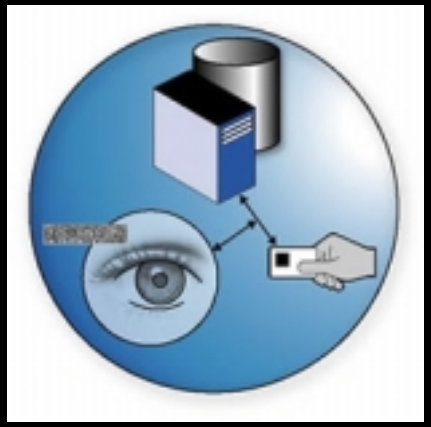


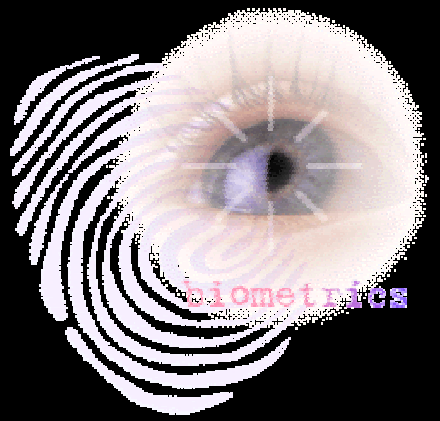


Biometrics



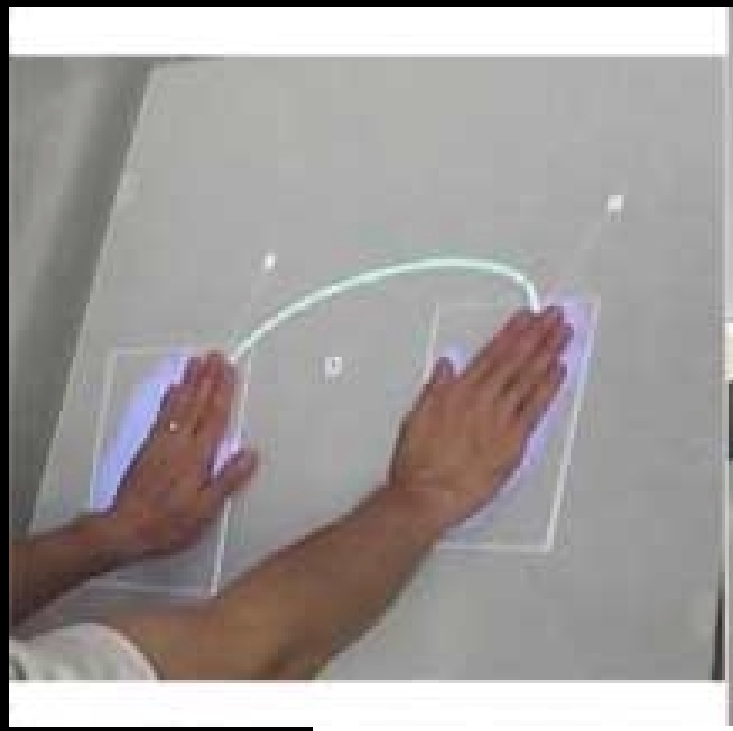
Airport
JALWAYS
Iris Recognition @ Work
Protecting people through secure identification.
Simplified Passenger Travel: Narita Airport, Japan



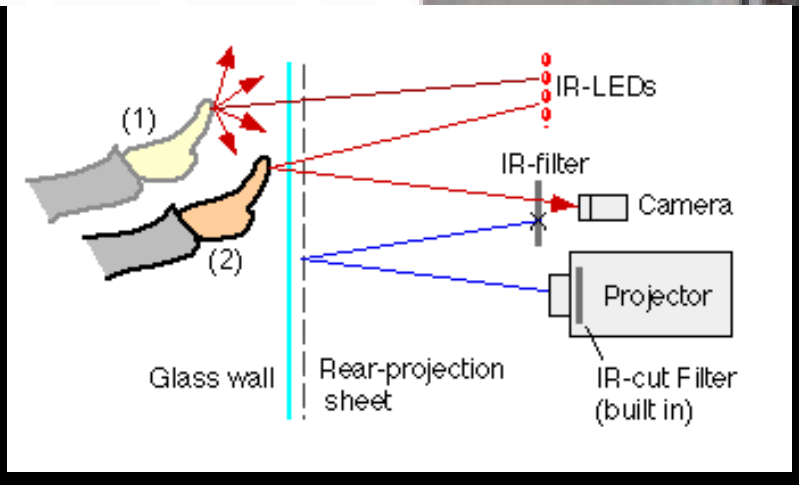

Biometrics

The Building as Computer

ceilings™

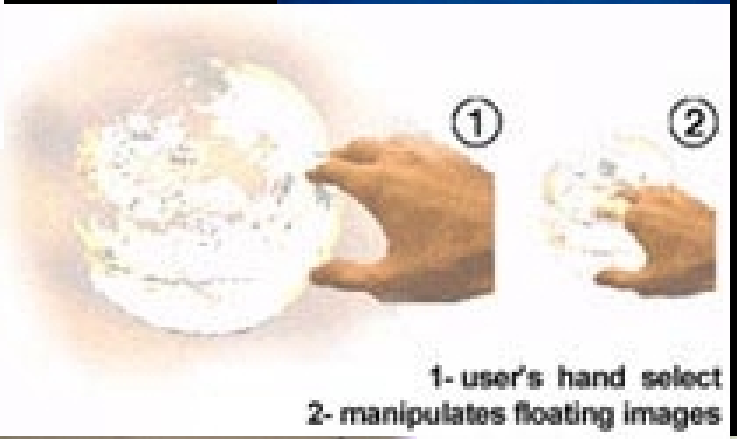


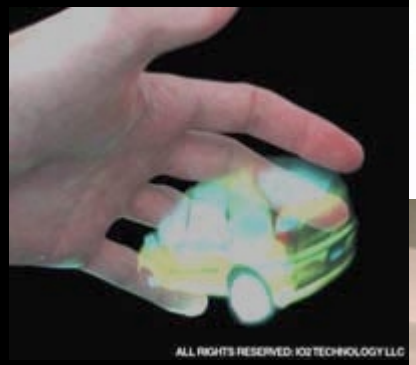
IR-light
Camera
IR-filter


(1)
(2)
IR-LEDs
IR-filter
Camera
Projector
Glass wall
Rear-projection sheet
IR-cut Filter (built in)

The Art of the Possible
Transparency…

Future
visions


1
2
1- user's hand select
2- manipulates floating images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AIR

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EXIT

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- Screampoint
- Peoples Republic of China
- Shanghai Municipal Government
- The Government of Singapore
- Walt Disney Company, Inc.
- MIT Media Labs
- Bloomberg, Inc.
- Stanford University CIFE
- Apple Computer Corp.
- Government of New Zealand
- Peter Jackson/WETA International - The Lord of the Rings

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