PRAJA

Digital Experience:
Better Than Being There.

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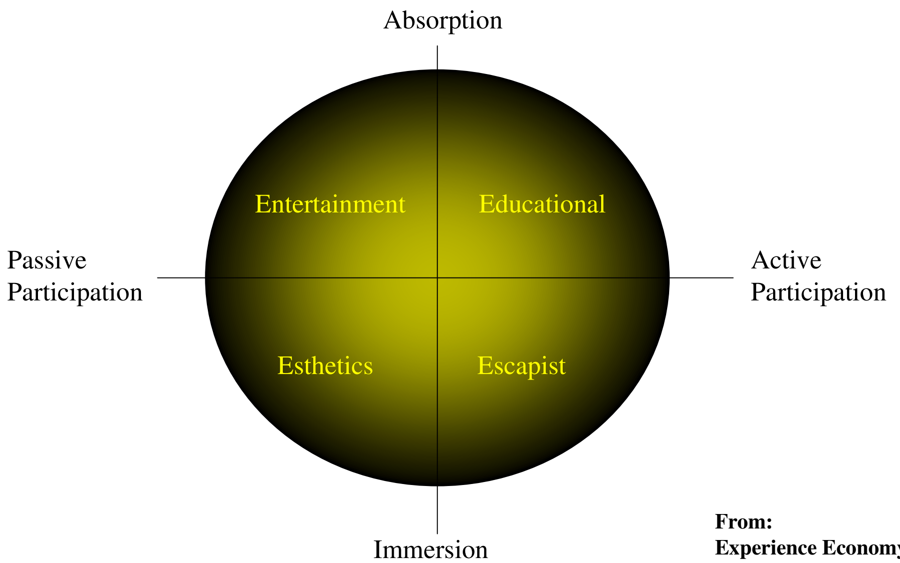
November 4, 2000

Experience

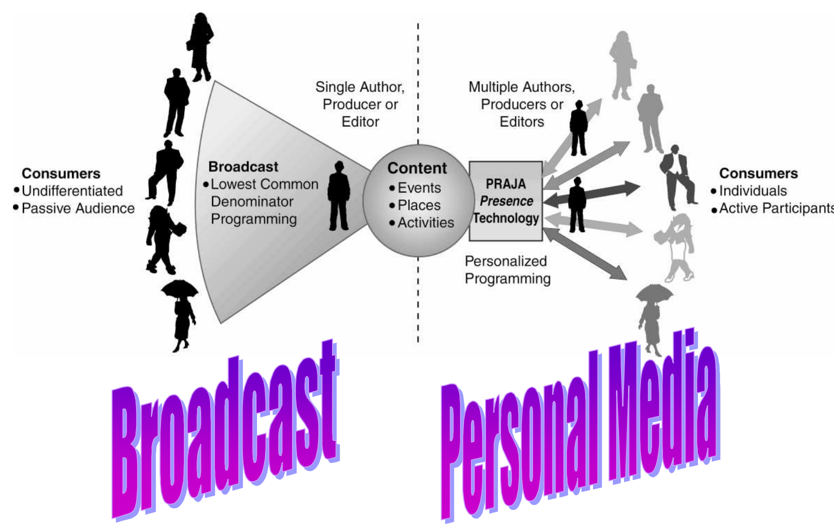
- Direct Observation and Participation
- Two Modes
  - Being there
    - Immersed in the environment
    - Can use your ‘senses’
    - Can decide which ‘view’ of the environment to experience
  - Remote experience
    - Sensors
    - Model of the environment
    - Communication medium
    - User Interaction

Nature of Experiences



From:
Experience Economy
By Pine and Gilmore

Event Experience



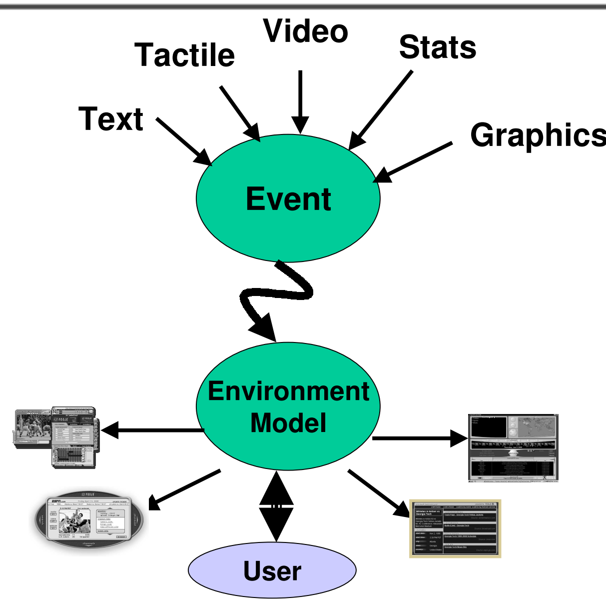
Major Inventions

Invention	Application Impact
Languages	Communicate symbolic experiences
Written Languages	Record Symbolic experiences
Paper	Portability
Print	Mass distribution
Telegraph	Remote narrow communication
Telephone	Remote analog communication
Radio	Analog broadcasting of sound
Television	Analog broadcasting of Sight and Sound
Recording media	Analog recording
Digital processing	Machine enhancement and processing
Internet	Multimedia communication

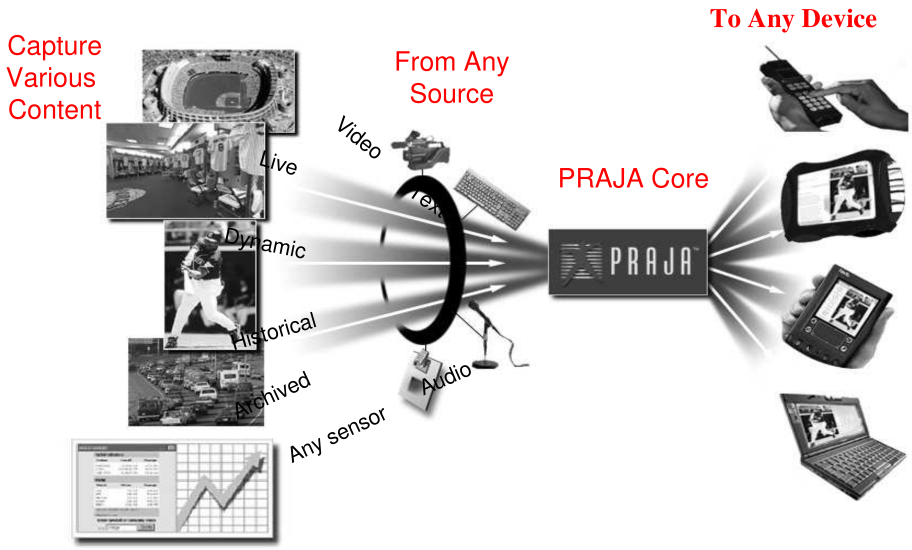
Components of Experience

- Assimilation of sensed information to form Environment model.
- Communication of model and sensed data.
- Participation or Interaction environment for a user.
- Presentation of the correct 'view' to the user.

Digital Experience



Creating Experiences



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Towards Experience on Internet

Data

Information

Experience

Experience:
Direct observation or participation

Information:
Search, specialized sources

Data:
Text, Statistics, Sensors (Video)

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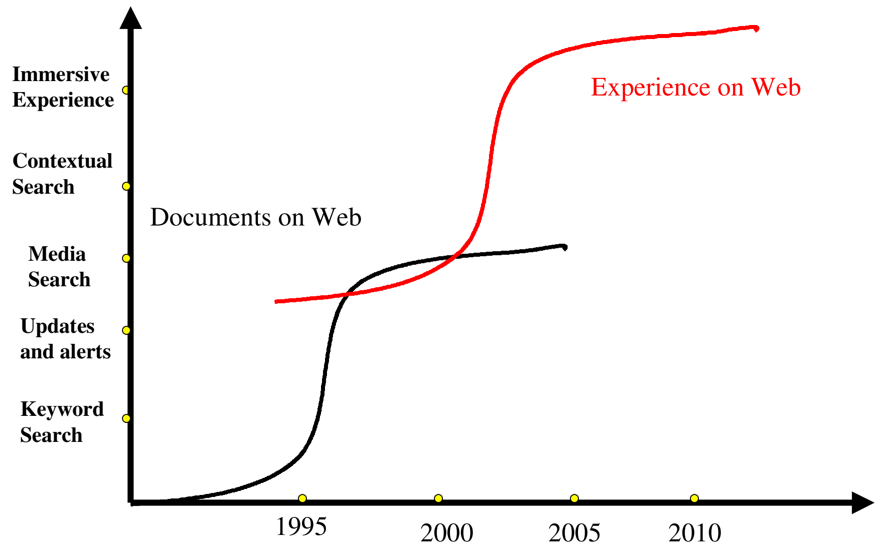
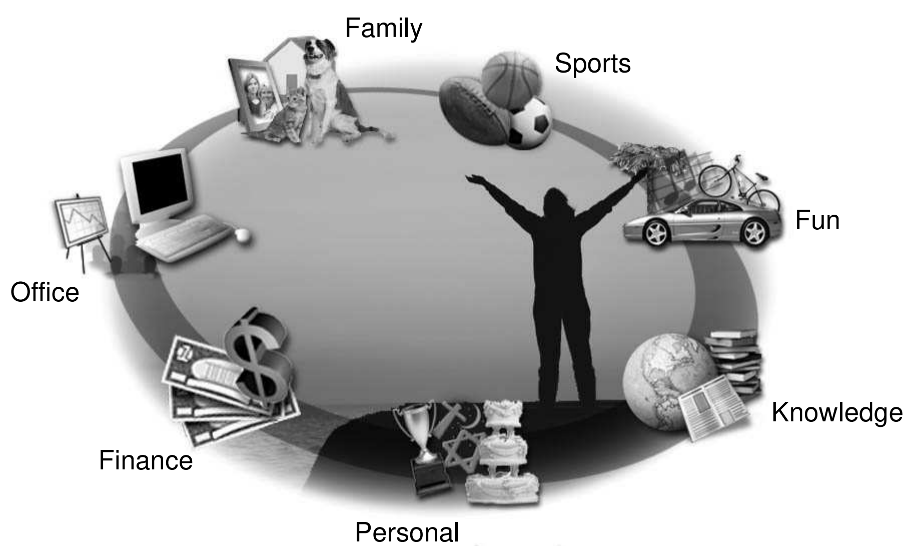
The Current DocumentWeb:

Strategic Inflection Points



Needed: EventWeb



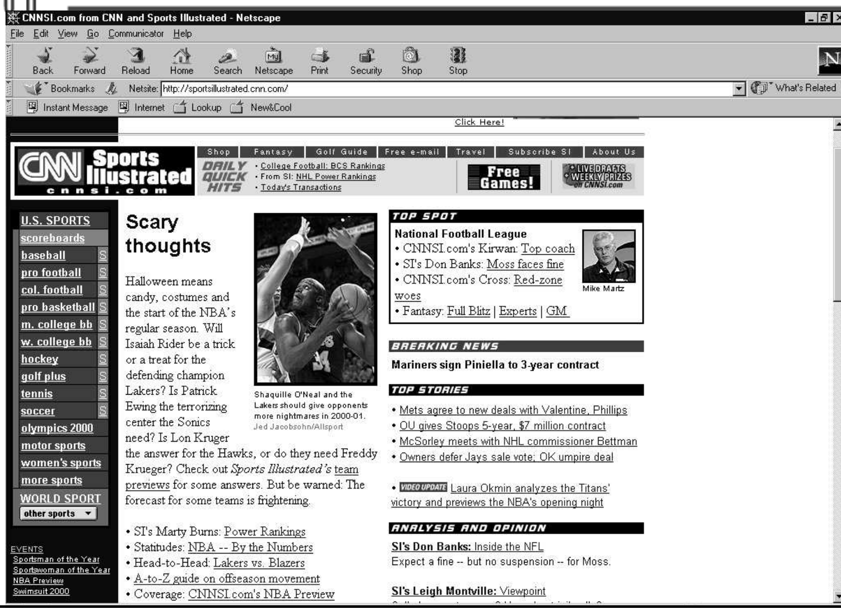
Maximizing the Value of Content

- **Value = Assets X *Reconfigurability***

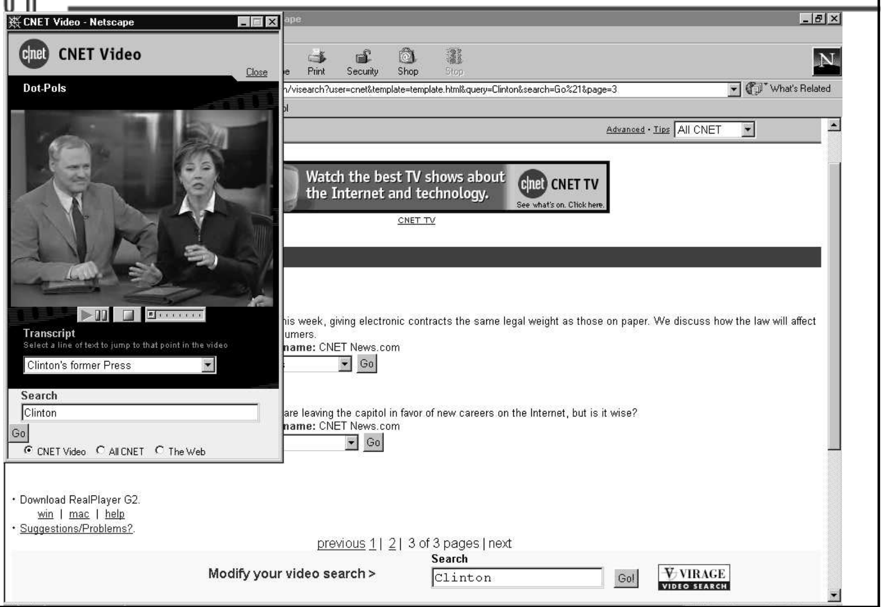
For both Live and Archived content.

CNN Sports: Multimedia Central

CNN Sports: Main Page



Video Search

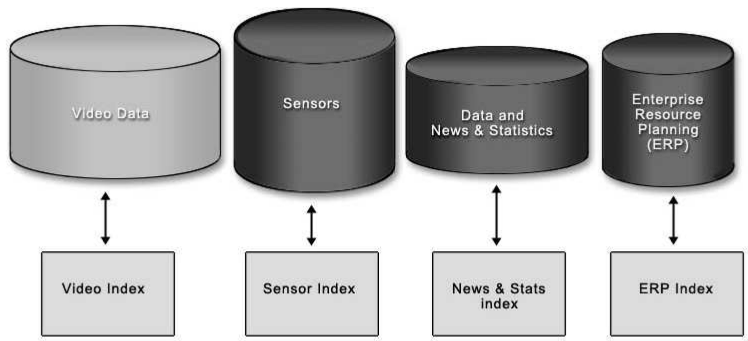


Unified Indexing

- Should not use idiosyncrasy of a medium
  - Video: time, frame number; Text: page, line; ...
- Should be independent of a medium
- Should allow indexing into all media

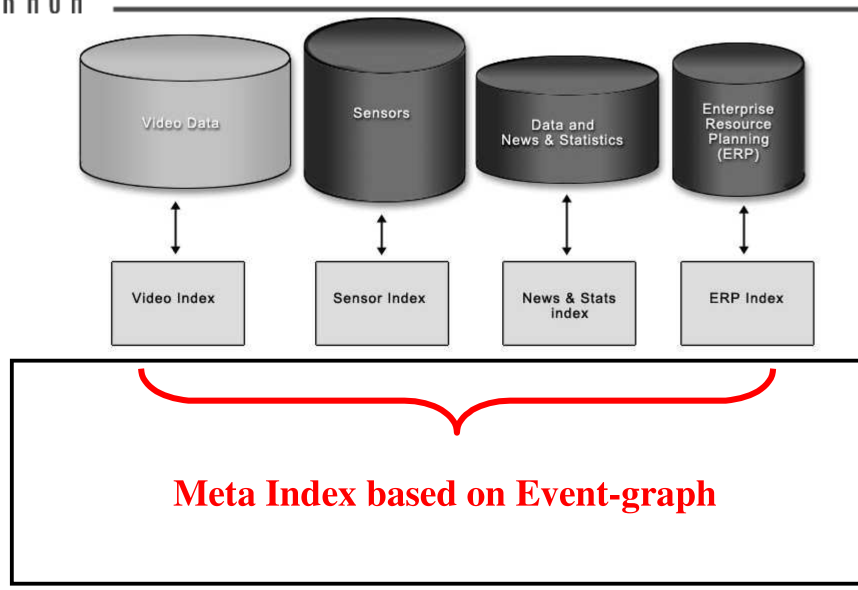
Event hierarchy is the best ‘unified indexing’.

Current Indexing Approaches

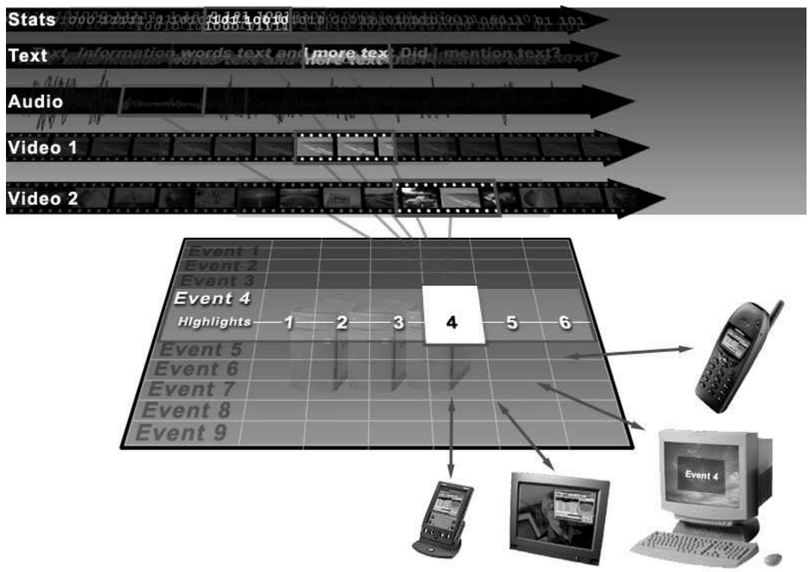


- Different databases have different indexing
- Assets are generated at different time and at different place and dumped in the ‘warehouse’
- No unified indexing approach

Unified Indexing



Event Indexing



Contextual Search

- Context = (person, location, time, situation)
- Person = (set of preferences, personal data)
- Situation = (weighted activity history)

- Contextual Search = Search in Context
- Contextual Inference = Anticipation

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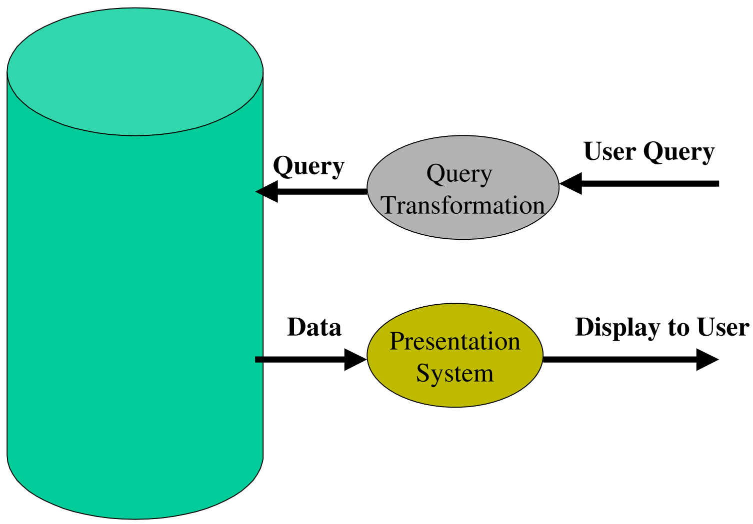
Query Processing



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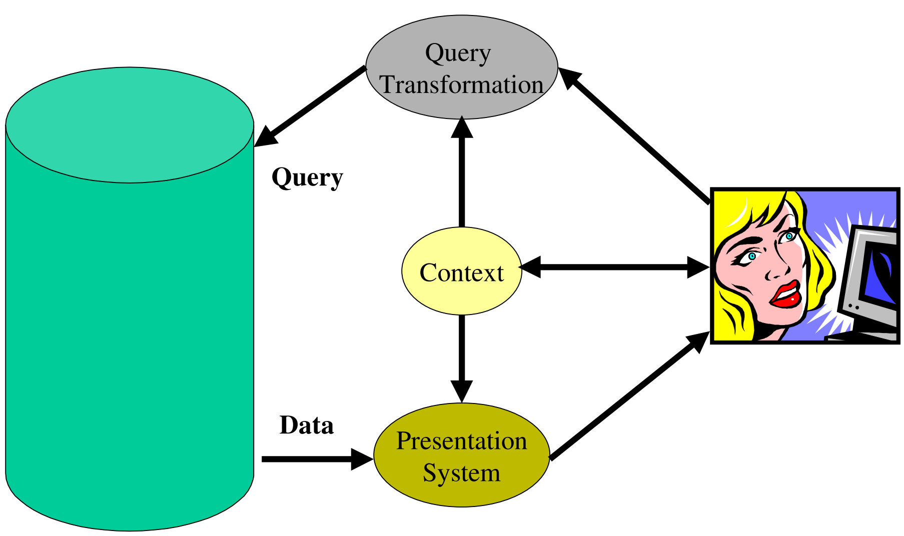
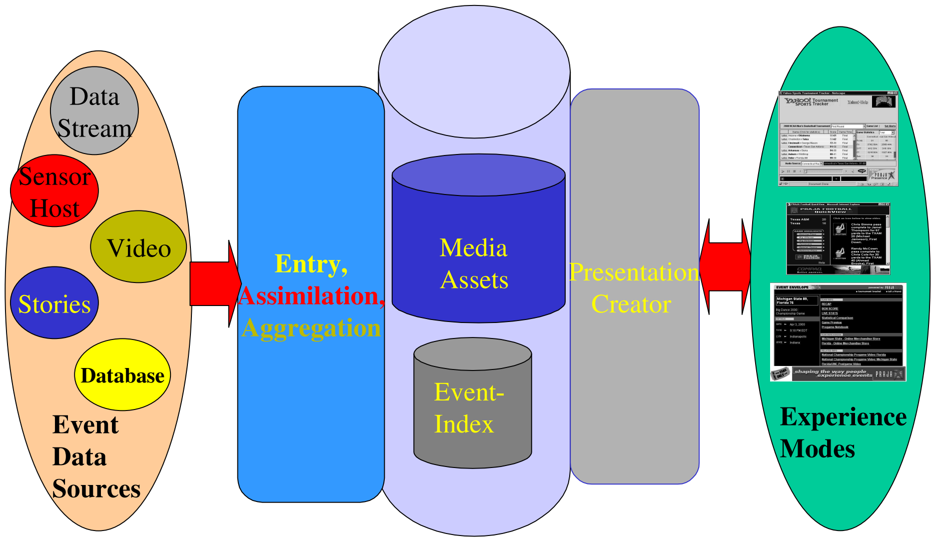
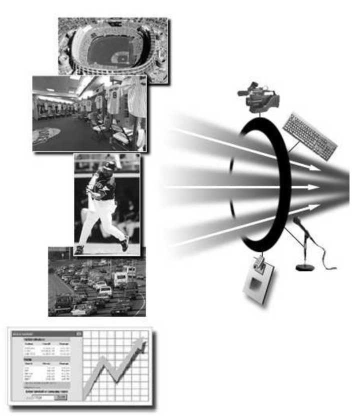
Contextual Query Processing



PRAJA ExperienceWare Architecture



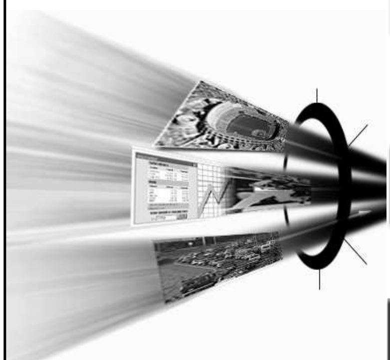
Capturing Digital information



- Data Source (server console)
- ExperienceCam Module
- XML Event language
- QuickView Module
- Event Submission

- Locate digital info in any database and create links to it
- Capture sensor data
- Capture active data sources, live stats feed
- Bulk load digital info into the EMS server

Data Model and data assimilation



Data Assimilation (server console)

- Assimilate and aggregate digital information & assets - categorize & organize by topic, participants, time & location

Data Modeling (server console)

- Create a hierarchal, spatio-temporal data model for the digital info

Active Attributes (server console)

- Dynamic updates of related links, declarative vs programmatic

Indexing and Navigation

Unified Indexing Module

Index & search <u>all</u> digital info simultaneously regardless of type or location

W4 search Module

Discover info by time, space, location and context

Event finder Module

Multidimensional contextual search and spatial info mgt via data visualization

Presentation

Customize and personalize entire front end look and feel, including by user role & preferences

Render data in multiple formats to any device

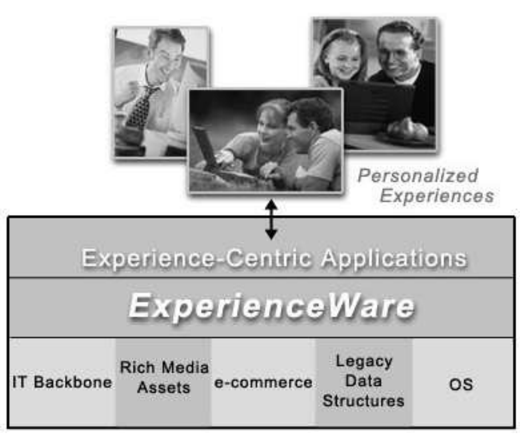
Display live updates send alerts to cell phones, pagers

Tag library (jsps & java beans)

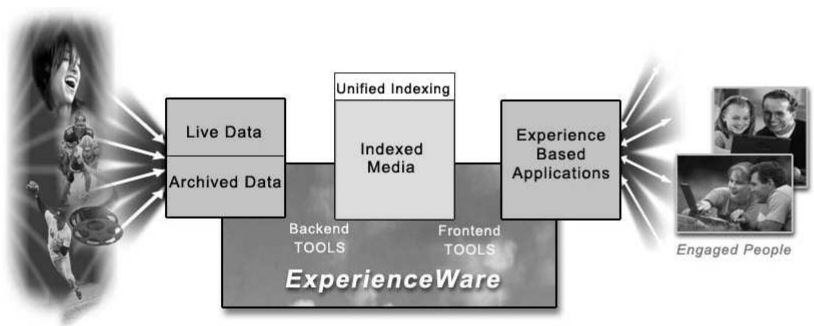
Sample templates

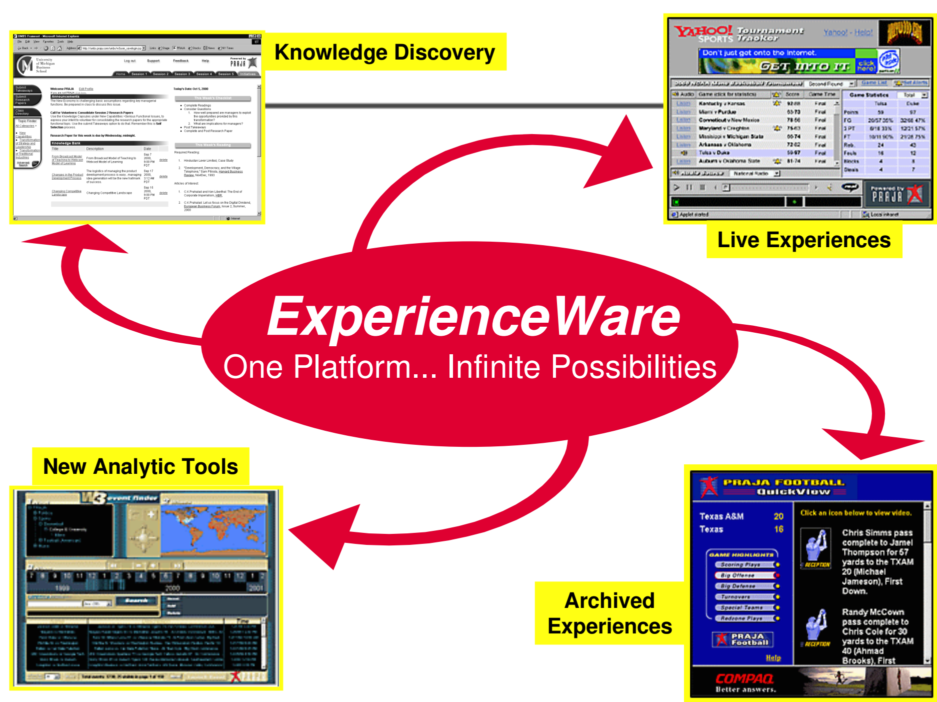
Notification (wap)

PRAJA's Solution: ExperienceWare



Rapid Experience Development





PRAJA's Customers

ZURICH FINANCIAL SERVICES

GM

YAHOO!

FOX SPORTS

PISTONS DETROIT

PalaceNet.com

University of Michigan Business School

CBS

CRICINFO THE HOME OF CRICKET ON THE INTERNET

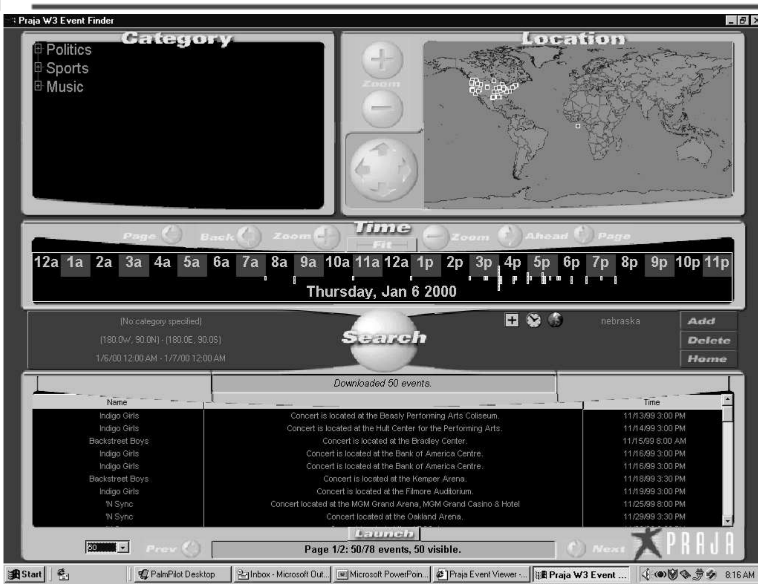
broadcast

NCAA FOOTBALL

ICE•PALACE

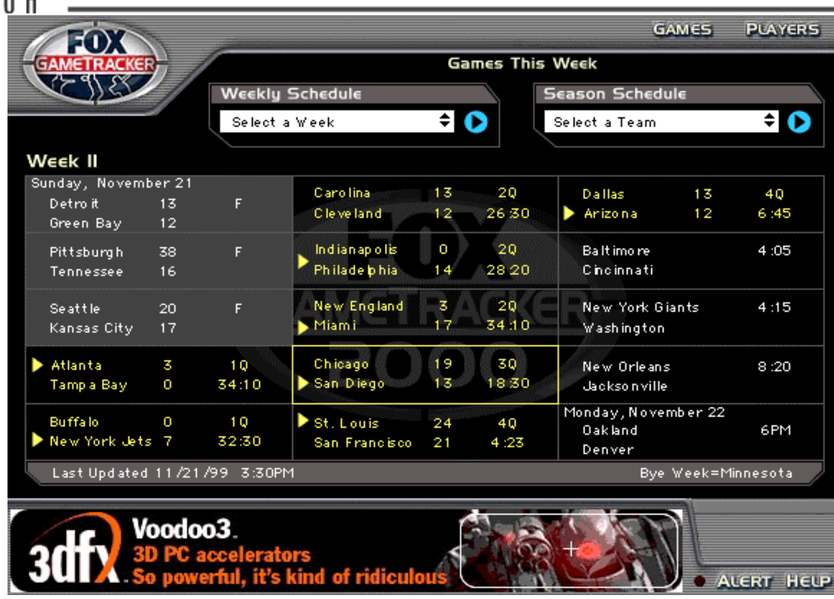
INTER CHANGE

W3 Search: Contextual Search



Time Machine - Replay

Trackers



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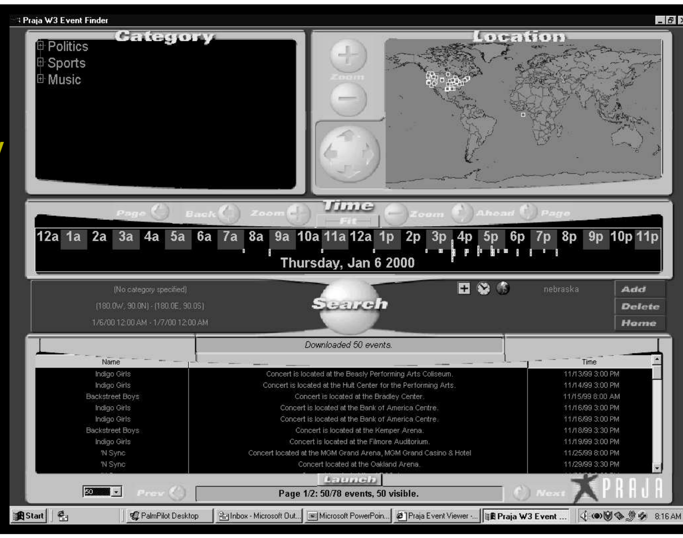
ExperienceWare: A Presentation Module

Visual Contextual Explorations

Context Visualization

Knowledge Discovery

Insights Building



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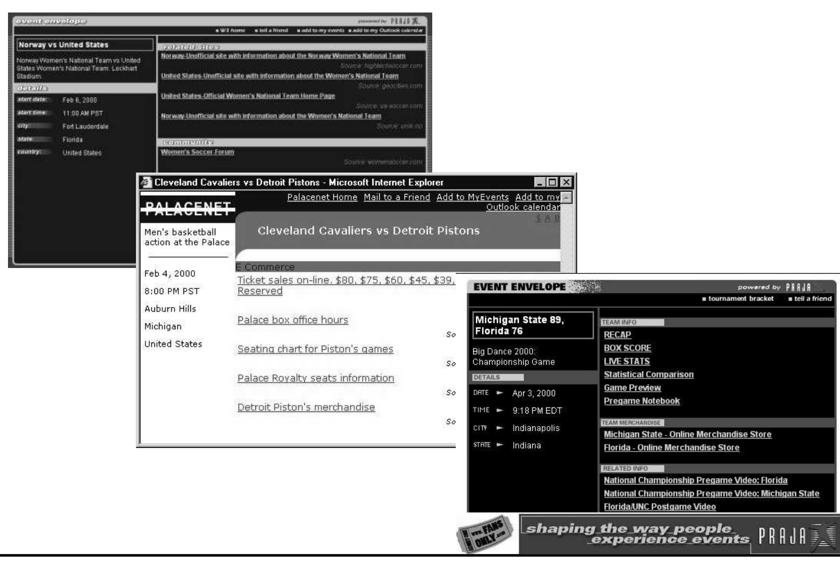
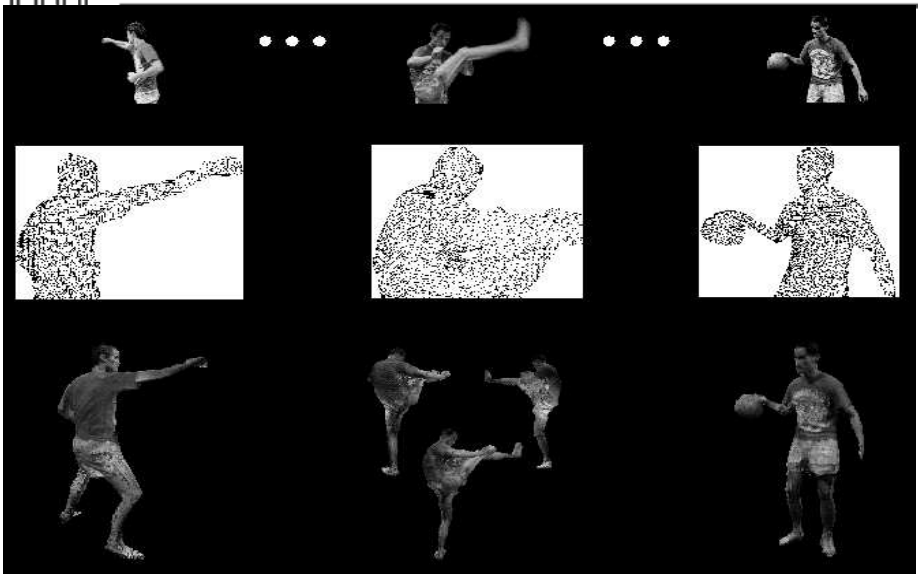
Experience Capsules: Forming Communities



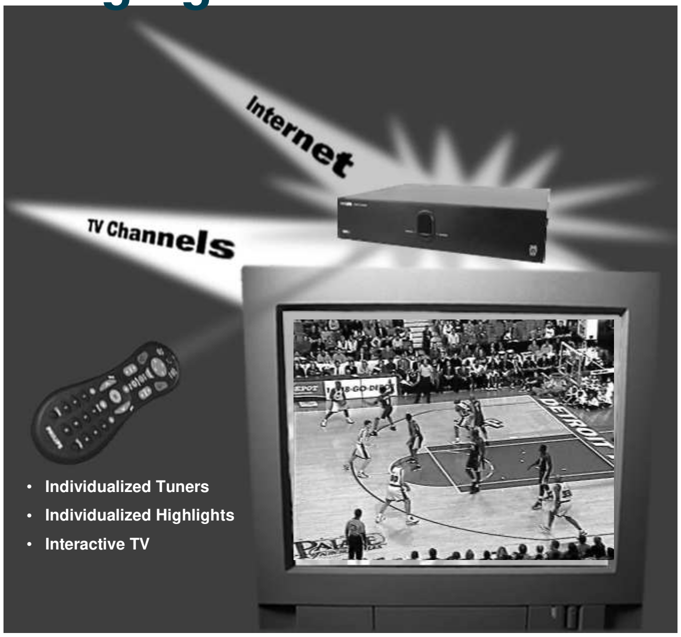
Tomorrow

Conceptual Application: Multiple Perspective Interactive Video

Conceptual Application: Immersive Viewing



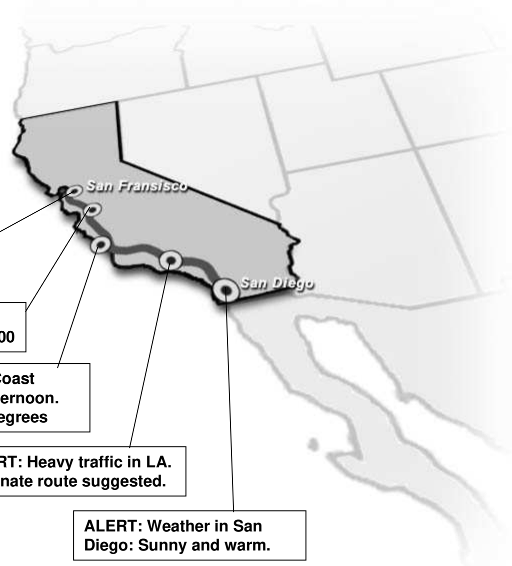
Converging Media



PRAJA Enabled Trip

Joe Cadillac

- Likes traveling
- Plays golf
- Loves surfing
- Hates traffic
- Lives in San Diego



ALERT: San Fransisco to San Diego = 550 miles, take Highway 101 S.

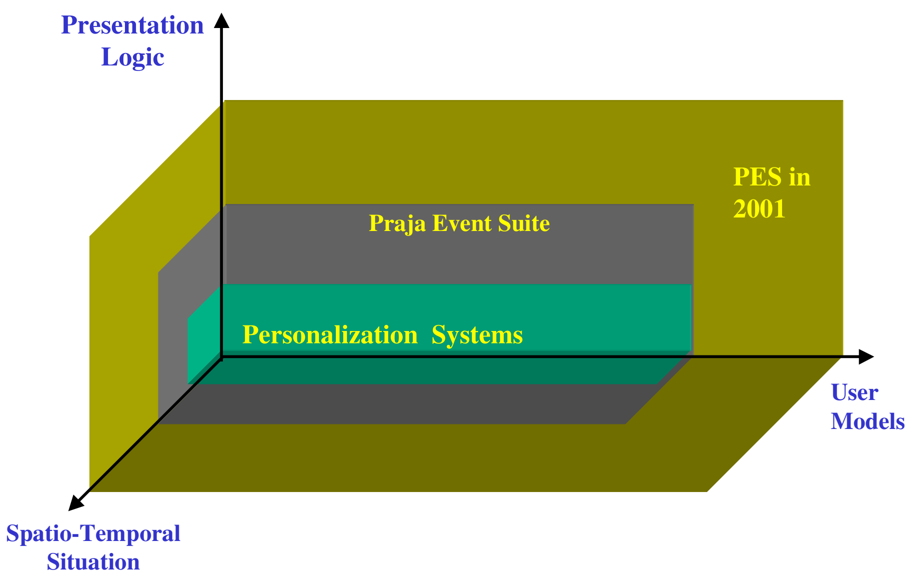
ALERT: Pebble Beach Pro Am: 10:00 AM , Tickets $15.00

ALERT: Central Coast waves: BIG all afternoon. Water temp: 56 degrees

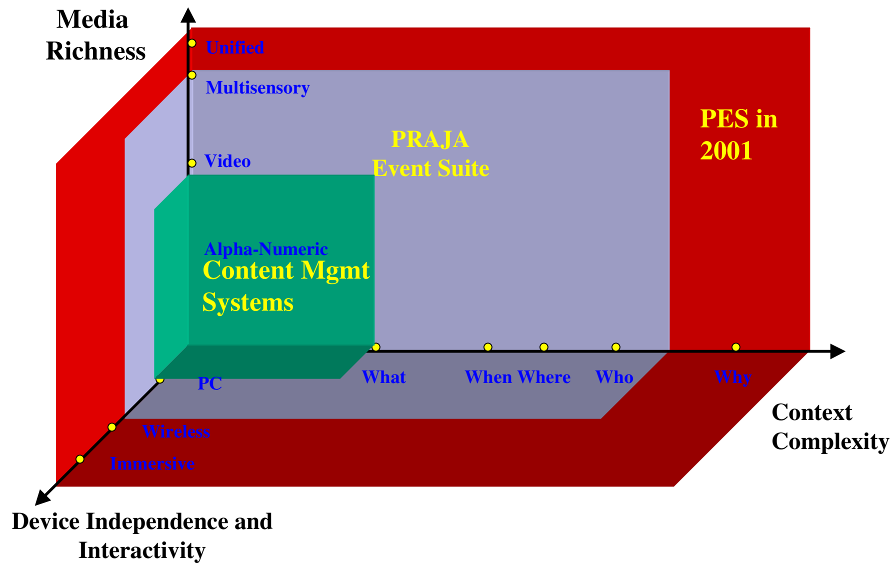
ALERT: Heavy traffic in LA. Alternate route suggested.

ALERT: Weather in San Diego: Sunny and warm.

Personalized Experience



Content Management Systems



Research Issues

- Assimilation of disparate data
- Unified indexing
- Contextual approaches
- Presentation for experience

PRAJA is interested in research partnerships.

For more information, contact

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