Peering into the Crystal Ball – Future Technology Directions in Legal Department Systems

Presented by:
Scott Rosenberg
Managing Director
Huron Consulting Group

Robin Snadell
Director
Huron Consulting Group

Experience. Redefined.
Introduction

The Law Department of 2015 will be using technology differently than today.

Over the past several years, we have seen the advent of search engines, portals, social media, matter centric computing and other forms of technology that promote improvements in knowledge sharing, process efficiency and collaboration while reducing the cost of legal spend.
Huron Consulting Group

• Multi-disciplinary business consulting firm
• 1,200+ Consultants with global presence
• Includes a Legal Consulting Business focused on issues of:
  – Business Operations
  – Cost Control Initiative
  – Technology and Process Improvement
  – Information Management
  – Document Review, Processing & Production (V3locity)
Topics for Discussion

• Predictions for 2015
• Causal Factors in Technology Change
• 5 Near-Term Trends
  • Matter Management / eBilling
  • Data Warehousing
  • Search Engines
  • Analytics
  • Information Delivery
• Coming Soon
  • Web 2.0
  • Non-PC Computing
  • Social Media, 3D Technology, ??
• Questions & Answers
Predictions for 2015
Predictions for 2015
Information Architecture

Application Layer
- Matter Mgmt
- Document Mgmt
- SAP
- HR
- Other Legal Specific*

Extract, Transform, Load (ETL) → Data Warehouse (fielded data)

Data Layer
- Data Structure Mapping (e.g., BO Universe)
- Content Storage (documents)
- Search Engines

Presentation Layer
- Dashboards
- Reports
- Analytic Engines

Traditional UI \ Portal | Intranet Home Page

* Includes Corp Secy, eDiscovery, IAMS, etc.
Predictions for 2015
By Layer

• Application Layer
  – Vendors will continue to offer more functionally robust solutions as they increase the scope and capability of their core products.
  – SAAS / cloud computing will become more prominent as clients choose external service providers over internally-hosted systems.
  – Continued focus on matter-centric computing paradigm; HOWEVER, a shift in focus to more holistic legal content management will put equal (if not greater) focus on search engines and their ability to better search & collate both structured (data) and unstructured (document) information.

• Data Layer
  – Exponentially more data will be available for use & reporting, tracking every aspect of work effort
  – Application layer integration will become less important as technology serves up information independent of the data repository from which it is stored
  – Data warehousing will increase as companies focus on data layer integration rather then traditional UI integration
  – Improvements in content storage tools and security will reduce the risk and concern of accessing data remotely or collaborating with external entities

• Presentation Layer
  – Web technologies will provide a more seamless connection to disparate information allowing for easier systems integration and information delivery through a web portal
  – Presentation & searching tools will become more prominent, and accessible via portable devices
  – Greater emphasis will be placed on tools in support of virtual legal teams and real time collaboration for decision-making
Causal Factors in Technology Change
Business & Technology Drivers

1. Changing corporate economics
2. Exponential change in technology development
Changing Corporate Economics

- Emphasis on cost reduction & control
- Doing more with less
- Globalization of services
- Greater demand for increased productivity/efficiency
- Litigation & risk management

Source: 2008 Chief Legal Officer Survey

Law Departments are concerned with the following:

- Cost control: 27.9%
- Compliance: 12.8%
- Limited resources: 14.4%
- Globalization: 8.1%
- Lawyer recruitment & retention: 6.3%
- Litigation/Risk management: 6.4%
- Client service: 4.5%
- IP/Patent issues: 4.5%
- E-Discovery/Records management: 3.6%
- The economy: 3.6%
- Lawyer career progression: 3.6%
- Law dept. leadership succession: 2.7%
- Privacy: 0.9%
- Lawyer compensation: 0.9%
- Other: 0.9%
Exponential Change in Technology Development

Moore’s Law

- Doubling of transistors every 2 years
- Logarithmic doubling of calculations per second
- Increase in calculation capacity every 1.2 years

Source: Ray Kurzweil, Kurzweil Technologies, Inc.
Exponential Change in Technology Development (cont.)

Internet Usage
- Internet connectivity
  - Nielsen’s law doubling of premium-access internet bandwidth every 21 months
- Internet users
  - 360M to 1.8B since 2000 as of 12/31/2009

Wireless bandwidth
Portable devices
Storage capacity

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>991,002,342</td>
<td>4,514,400</td>
<td>86,217,900</td>
<td>8.7 %</td>
<td>1,809.8 %</td>
<td>4.8 %</td>
</tr>
<tr>
<td>Asia</td>
<td>3,808,070,503</td>
<td>114,304,000</td>
<td>764,435,900</td>
<td>20.1 %</td>
<td>568.8 %</td>
<td>42.4 %</td>
</tr>
<tr>
<td>Europe</td>
<td>803,850,858</td>
<td>105,096,093</td>
<td>425,773,571</td>
<td>53.0 %</td>
<td>305.1 %</td>
<td>23.6 %</td>
</tr>
<tr>
<td>Middle East</td>
<td>202,687,005</td>
<td>3,284,800</td>
<td>58,309,546</td>
<td>28.8 %</td>
<td>1,675.1 %</td>
<td>3.2 %</td>
</tr>
<tr>
<td>North America</td>
<td>340,831,831</td>
<td>108,096,800</td>
<td>259,561,000</td>
<td>76.2 %</td>
<td>140.1 %</td>
<td>14.4 %</td>
</tr>
<tr>
<td>Latin America/Caribbean</td>
<td>586,662,468</td>
<td>18,068,919</td>
<td>186,922,050</td>
<td>31.9 %</td>
<td>934.5 %</td>
<td>10.4 %</td>
</tr>
<tr>
<td>Oceania / Australia</td>
<td>34,700,201</td>
<td>7,620,480</td>
<td>21,110,490</td>
<td>60.8 %</td>
<td>177.0 %</td>
<td>1.2 %</td>
</tr>
<tr>
<td>WORLD TOTAL</td>
<td>6,767,805,208</td>
<td>360,985,492</td>
<td>1,802,330,457</td>
<td>26.6 %</td>
<td>399.3 %</td>
<td>100.0 %</td>
</tr>
</tbody>
</table>

Source: Ray Kurzweil, Kurzweil Technologies, Inc.
Exponential Change in Technology Development (cont.)

The results…

- Logarithmic increase in paradigm shifts
- Increase inventions & patent filing
- Web 2.0 / the metaverse emerges

Source: Ray Kurzweil, Kurzweil Technologies, Inc.
5 Near-Term Trends
The Here & Now…

Common Law Departments technologies:
Trend #1 – Matter Management \ eBilling

- Expansion of core product functionality to include:
  - Document Management
  - Compliance Tracking
  - Legal Hold
  - Discovery Management
  - Contract Management
  - Collaboration with Outside Counsel

- Convergence of Matter Management & eBilling vendors & functions
- Broader adoption beyond the litigation practice area
- Increased perception as “central hub” for matter & financial management data
  - Matter Centric Paradigm
Trend #2 – Data Warehousing

- Matter management vendors and solution providers are promoting the use of data warehouses as part of a *standard* deployment of their system
  - Combines access to multiple data sources
  - Offloads dependency on the operational data source for I/O intensive processes like reporting – optimizes performance
  - Simplifies report development
  - Provides alternative to traditional system integration – data layer versus UI

- Increased used of Business Intelligence reporting tools
  - simplify ad-hoc reporting (e.g. Business Objects or Cognos)

- Data integration tools facilitate application integration at the data layer
  - Business Objects ETL tools
  - support business process rules and event triggers (e.g. IntApp)
Trend #3 – Search Engines

- Google-like searching is familiar to attorneys and search results can be independent of data source; search engines are being used to manage both unstructured (documents) and structured (fielded) data.

- Vendors are converting to “matter-centric” directory structures.
  - Questions: Do all matters require a matter management system? Is a data warehouse needed if all authoritative source data can be searched?

- SharePoint is the most commonly used tool for document management and/or records management by either enterprise or Legal Departments according to a recent Fortune 250 survey conducted by Huron Consulting Group (see below).
Trend #4 – Analytics

- Dashboards are actually being developed and used
- Dashboards support “click through” or “drill down” capabilities allowing for deeper dive answers
- Vendors are producing canned sets of legal metrics and associated dashboards
Analytics (cont.)

- 3rd party OLAP reporting tools are standard components of relational database management systems (RDBMS); most vendors no longer develop proprietary solutions

- Performance metrics are being used to *proactively* assess outside counsel, assign appropriate resources and identify legal trends and opportunities—predictive analytics

- Predictive analytics provides *proactive* versus *reactive* based reporting

- In the hands of a financial analyst, the tools are capable of producing highly complex reports
Trend #5 – Delivery & Presentation of Information

- Law Departments are developing both legal portals and client-facing web sites
- Web technologies—e.g. web services and web parts—allow functional components of current applications to be built into a single web page or site
Coming Soon...
Web 2.0 is associated with Web applications that can facilitate

- Interactive and open information sharing with peers
- Interoperability between web applications
- Client self-service and collaboration
- Examples include online communities, hosted services, social networking sites, video sharing sites, wikis, & blogs

A tag cloud is an example of Web 2.0 technology
Non-PC Computing

- Web-enabled phones and PDAs are increasing Web-accessibility and interactivity. These developments offer legal practitioners new tools to do their jobs. For example:
  - Attorneys—smart phones like the iPhone or Blackberry have at their disposal almost unlimited resources, such as:
    - The entire searchable/scrollable text of the Federal Rules of Civil Procedure
    - The Constitution
    - Patent prosecution rules
    - Sarbanes-Oxley and other federal \ state regulations
    - Jurisdiction-specific "court days" calculator
    - West’s *Black's Law Dictionary* (via app-form for the iPhone, iPod Touch and iPad).
  - Law students—West introduced BARBRI Mobile for students enrolled in the BARBRI bar review course.
In 2016, how many hours per week (0-20+) will a typical member of the U.S. population ages 13-30 use interactive, internet-accessing, 3D visual environments (3D video, 3D virtual, or 3D mixed-reality) for EACH of the following activities?

- Social Entertainment and Communication: 10.5 hours
- Income Production: 8.5 hours
- Solo Entertainment: 7.4 hours
- Education and Creativity: 5.6 hours
- e-Commerce: 3.9 hours
- Navigation: 3.4 hours
- Exercise: 1.7 hours
- Assessment: 1.3 hours

Source: Ray Kurzweil, Kurzweil Technologies, Inc.
Real time conferencing with outside counsel team

Real time actuals as they are captured v. budget

Relevant internal and external documents and records and discovery

One click jury or expert opinion

One click to project team or court tweets

Predictive Analytics

Near conversational query capabilities and innovative results screens

Performance Metrics

Portable devices

Facebook style team creation and status updates

3D and real time imagery

The Legal Desktop (2015)?
Questions & Answers

• Scott Rosenberg – srosenberg@huronconsultinggroup.com

• Robin Snasdell – rsnasdell@huronconsultinggroup.com