Ellucian Portfolio and Roadmap Update

Banner

October 2, 2012
Roadmap Framing and Confidentiality

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Major Trends in Higher Education

Revenue Pressures and Austerity
Engaging Students
Education Access and Readiness
Accountability and Outcomes
Global
Transformative Technology
Resulting Higher Education Challenges

**Funding Pressures**
- Revenue management: recruitment, retention, fundraising
- Increasing enrollment, capacity, revenue generation
- Tuition pressures and affordability

**Operational Efficiency**
- Optimizing resources, containing costs
- Process transparency, agility, improvement
- Financial visibility, discipline, controls, metrics

**Student Success**
- Services and tools to keep learners on track
- Diverse, flexible pathways to learning
- Improving learning outcomes (retention, completion, etc.)

**Accountability**
- Timely, reliable, useful information for each stakeholder
- Measuring and documenting performance, outcomes, compliance
- Data-driven decisions and discovery-based planning

**Constituents’ Expectations**
- Faster, more flexible access to information and services
- Managing and keeping up with pace of technology change
- Education experiences that set your institution apart

**Engaging the Community**
- Cultivating relationships with constituents of all types
- Partnerships with donors, peer institutions, industry, etc.
- Shared services, community source, resources, information, best practices
Introducing Ellucian XE
Ellucian Extensible Ecosystem (XE)

- A vision for how we help institutions thrive during a time of dynamic change
  - An extensible and evolving ecosystem of solutions and services
  - An architectural strategy grounded in common principles and standards
  - A portfolio approach that accelerates innovation
  - A better way for customers to evolve their technology environments and protect their investments
Architecture Evolution Comparison

Power Users

Web Services
- UniData
- Microsoft App Server

Microsoft

Web Services
- Oracle Forms
- Java App Server

Oracle

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Extending a Strong Administrative Foundation

Self Service

Admin UI

LMS & Partners

Banner XE

Colleague XE

PowerCampus XE

Liferay/Luminis

PORTAL / WEB

SharePoint-based

ANALYTICS

MOBILE

API’s / Web Services

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Common Architecture
From Horizon to Banner XE

- Ongoing efforts have taken several names, but end result is forward progression
  - 2009 new technology framework chosen (Java stack)
  - 2010 built initial platform/integration and shared vision with customers
  - 2011 focus shifted to delivery proof points and more detailed delivery roadmap
    - Banner Student Course Catalog and Student Schedule of Classes
  - 2012 additional delivery proof points
    - Banner Faculty Grade Entry
    - Banner Events Management
    - Attendance Tracking
    - Alpha I Registration (Q4 2012)
  - 2012 Banner XE roadmap unveiled with 2X investment level
Banner XE Releases

Student Class Schedule

Course Catalog

Faculty Grade Entry

Events Management

Attendance Tracking

9/2011

1/2012

2/2012

9/7/12

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Evolution of Banner

API's / Web Services

Self Service

Admin UI

Banner 8.X

Registration
Courses
A/R

Finance

HR

LMS & Partners

Banner XE

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<table>
<thead>
<tr>
<th>Feature</th>
<th>Usability</th>
<th>Features/Functionality</th>
<th>Single Global Product</th>
<th>Configuration</th>
<th>Extensibility</th>
<th>Scalability</th>
<th>Off Premise</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Funding Pressures</strong></td>
<td>Reduced phone calls, support</td>
<td>Admissions Processes</td>
<td>Rules Engine</td>
<td>Reduced mods Git APIs</td>
<td>Performant Applications</td>
<td>Financial Aid Need Analysis</td>
<td></td>
</tr>
<tr>
<td><strong>Operational Efficiency</strong></td>
<td>Consolidated Workflows, e.g. Event Mgmt and FGE</td>
<td>Added SS for Event Attendance Tracking</td>
<td>Business Process Mgmt</td>
<td>Reduced skill set needed to support</td>
<td>Testing scripts</td>
<td></td>
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</tr>
<tr>
<td><strong>Student Services</strong></td>
<td>Registration —UMN usability eval, Alpha 1 goals</td>
<td>Link to planning, academic model flexibility Support for advisor persona</td>
<td>Academic models</td>
<td>BPM, automate processes Communication Mgr</td>
<td></td>
<td>Better integration with systems in the ecosystem</td>
<td></td>
</tr>
<tr>
<td><strong>Accountability</strong></td>
<td>Outcome data</td>
<td>BPM transparency in process</td>
<td></td>
<td></td>
<td></td>
<td>KPI in cloud</td>
<td></td>
</tr>
<tr>
<td><strong>Constituent Experience</strong></td>
<td>Future Proofing The UI pyramid</td>
<td>SS—any time, any where</td>
<td>Appropriate language</td>
<td></td>
<td>Why APIs matter, the GUI story</td>
<td></td>
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</tr>
<tr>
<td><strong>Communication Collaboration</strong></td>
<td>Diversity of practice = flexibility Attendance Tracking</td>
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</tbody>
</table>
Investments in Banner XE Doubling as Result

Area of Focus

Usability
Configurability
Features & Functions
Extensibility
Scalability
Off-Premise
Global Product

Investment

2009-2012
Horizon/Banner9
Q4 2012 Forward
Banner XE

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## Ellucian Roadmap Legend

### Technology
- This release is focused on architectural enhancements

### Quality
- This release is focused on quality

### Features
- This release is focused on features and functions

### APIs
- This release is focused on APIs

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Confidence Level Definitions

We use the term **confidence level** to describe the likelihood that the items on the roadmap will be delivered at the dates shown on the timeline. There are many factors that impact our ability to predict delivery including but not limited to:

- **Customer priorities** – Our releases are driven by customer feedback and prioritization. Sometimes the priorities change due to any number of external factors. At any time, we may change the priorities in any given future release to better reflect our customers' interests.
- **Quality Targets** – Each of our product releases undergoes a stringent quality assurance process prior to release. Should a particular capability not meet our quality targets, we may choose to defer that specific capability to a future release or not complete the development of that capability at all.
- **Design Constraints** – In response to customer feedback, we attempt to provide visibility beyond the next product release. In doing so, we share capabilities that reflect customer requests but have not gone through the technical design phase. In some cases, the technical design phase will reveal a larger level of effort and dependencies that make the original timeframe infeasible. Further, the design phase could reveal that the capability is not technically feasible at all or not cost effective resulting in abandonment of effort.
- **Budget Cycles** – For roadmaps that might include visibility beyond the current Ellucian fiscal year budget, all items are subject to financial progress against goals and the availability of funds for that particular project in future budget cycles.
- **Engineering Forecasting Accuracy** – All roadmap items are subject to some level of forecasting accuracy imprecision resulting in certain functionality pushing out to later releases on a roadmap timeline.

The further out the release date, the higher the likelihood that one or more of these factors will impact the accuracy of our roadmaps. That is why we clearly indicate less than 100% confidence for our next release even though it may scheduled to be released in the short-term, and why we use decreasing confidence levels for items that are further out on the roadmap.
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Banner XE Roadmap

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Jan-Jun</td>
<td>Jul-Dec</td>
<td>Jan-Jun</td>
<td>Jul-Dec</td>
<td>Jan-Jun</td>
</tr>
</tbody>
</table>

- **Features**
  - Add Data Fields
  - Platform APIs
  - Advising Roster
  - Graduation
  - Course/section
  - Class Schedule
  - Student Info
  - Submit Grades
  - Supporting APIs

- **APIs**

- **Exploring**

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# Banner Student Roadmap Highlights

<table>
<thead>
<tr>
<th>Highlight</th>
<th>Value</th>
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</thead>
</table>
| **Extensibility Framework** | Durable modifications, configurations, customizations, and integrations result in:  
  - Increased flexibility of the student information system to meet the unique needs of each institution  
  - Reduced implementation and support costs |
| **Attendance Tracking**  | Support the following institutional imperatives:  
  - Regulatory compliance with student aid and/or homeland security requirements  
  - Student success in the classroom |
| **Registration**         |  
  - Improve student success via engaging the student in the planning process and easing the friction in the administrative process  
  - Enable more flexible academic models  
  - Increase satisfaction with administrative systems for students, faculty, and advisors through improved user experience including tablet support |
| **Advisor Self-Service** |  
  - Improve student success through better support for advisors.  
  - Enable administrators to better serve their internal audience |
Preparing for Banner XE

- Understand Banner XE Architecture and Technologies
  - Java Platform
  - Groovy
  - Grails
  - jQuery and ZK

- Access Commons Resources
  - Banner XE Developers Guide
  - Banner XE FAQs
  - Innovation webinars

- Attend an Ellucian education class
Summary

- Banner XE is about evolution
  - It’s about evolving the solution and technology platform to support the needs of institutions for decades to come
- Banner XE is about taking advantage of new capabilities sooner and with less disruption
  - It’s about implementing the functionality you want at your own pace
- Banner XE is more than a UI uplift
  - It’s about delivering the most feature rich and globally complete solution
Ellucian Analytics is.....

...a suite of solutions that turn data into information promoting tactical and strategic data-informed decision making for institutions of higher education
Analytics Challenges Facing Today’s Institutions

**CIO/IT**
- Limited staff resources to manage ever increasing information requests
- Limited staff resources to develop and manage a home-grown analytic solutions
- Aging reporting tools with declining value

**Admin/Acad. Depts.**
- I don’t have the data I need to support critical program decisions.
- It takes forever to get a custom report; and when I get one, the data doesn’t match my colleagues’ data

**Inst. Research**
- I spend more time indentifying data points and justifying the accuracy of the data than producing high value research

**Exec. Leadership**
- Why can’t I get the information I need, when I need it, in the format I need it to make key decisions?
Business Intelligence / Analytics Needs Evolve

Data **volume** grows
Number of **users** grows
Depth of **analysis** grows
Query **complexity** grows
Need to **visualize** grows
**Expectations** grow

**OPERATIONALIZING**
HOW should we take action?

**ANALYZING**
WHY did it happen?

**OPERATIONALIZING**
HOW should we take action?

**PREDICTING**
WHAT WILL happen?

**EDW + Performance Applications support more sophisticated BI needs**

Operational Data Store meets basic reporting needs

Operational Data Store

Data Sophistication & Institutional Value

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Managed Reporting
Ad Hoc Reporting
Analytics
Dashboards
Scorecards and Benchmarking

Proprietary and Confidential

November 1, 2012
<table>
<thead>
<tr>
<th>Solution</th>
<th>Recruiting &amp; Admissions</th>
<th>Student</th>
<th>Financial Aid</th>
<th>Finance</th>
<th>Human Resources</th>
<th>Advancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner ODS / EDW</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Banner Recruiting Admissions</td>
<td>✓</td>
<td></td>
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<tr>
<td>Performance</td>
<td></td>
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<tr>
<td>Banner Student Retention</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Performance</td>
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<tr>
<td>Advancement Performance</td>
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<td></td>
<td>✓</td>
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<tr>
<td>Strategic Services</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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</tbody>
</table>
Ellucian Analytics Vision

Higher Ed Analytical Models

- Enrollment Management
- Student Progress
- Learning Outcomes
- Financial Aid Optimization
- Alumni Engagement
- Budget and Finance
- Workforce Planning

External Data

Advocate
Banner
Colleague
Degree Works
Power Campus
Recruiter
Banner Analytics Roadmap

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# Banner Analytic Roadmap Highlights

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<tr>
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<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Providing the option for Oracle Streams or Materialized Views with Banner ODS 8.4</td>
<td>Reduce administration costs by simplifying installation, configuration, &amp; ongoing maintenance</td>
</tr>
</tbody>
</table>
| **Banner Student Retention Performance 1.1**  
**Banner Recruiting Admissions Performance 1.3**  
**Banner Advancement Performance 1.2**                                                                 | Continued investment in performance applications to increase ROI and drive broader user adoption |
| Degreeworks Integration                                                   | Increase self-service and cross functional analysis that helps drive process improvement for increased student persistence and graduation rates |
| Predictive Analytics Offerings and Partnerships                          | Integrates high-value predictive analytics with Performance Management solutions in order to optimize recruiting and fundraising effectiveness and increase student retention |
Ellucian Analytics

- Ellucian analytic solutions provide customers with “Higher Education Intelligence” designed to
  - Increase ROI, drive broader adoption
  - Lower total cost of ownership, minimizing Risk and reducing the burden on IT
Ellucian Portal
Ellucian Portal is…..

… a set of solutions that improve the personalized delivery of key institutional content and resources and increases the overall quality of communication within the campus community.
Portal Challenges Facing Institutions

**Audience**

- **CIO/IT**
  - Ability to easily keep up with ever changing and diverse constituent demands
  - Improve system management by reducing systems and integration complexity

- **Admin/Acad. Depts.**
  - Effectively communicate through timely and meaningful interactions
  - Provide personalized and ease access to a greater number of campus services

- **Exec. Leadership**
  - Stay competitive by providing a robust online and personalized experience to the campus community

- **Students**
  - Access information the information I need in the manner I want to access it
Ellucian Portal Offerings

Where we are today

- Datatel Portal
- Luminis Platform
- PowerCampus Portal

Colleague ERP
Banner ERP
PowerCampus ERP

Where we are going

- Ellucian SharePoint Portal
- Ellucian Luminis Platform

Colleague ERP
PowerCampus ERP
Banner ERP

Investigating
## Ellucian Portals Roadmap

### Features

#### Ellucian Luminis Portal
- Multi-Entity Processing (MEP)
- Targeted Messaging Enhancements
- Targeted Content Enhancements

#### Technology
- Liferay Portal Framework Upgrade,
  LR Community/Collaboration
  System Hotbackups

#### Quality
- Global Connector Framework XML Validation

#### Ongoing
- AMS Upgrade Campaign, Tiered Services
- Quick Start Guide for “do it yourself” installs
- Ongoing 118N updates & new baseline language bundles.
  Existing bundles as of LP 5.0.4 include Arabic, English, French, Portuguese, and Spanish.

### Technology

#### Exploring
- Parent Payment Portal
- Admitted Student Portal
- Banner 9 Portlet/Self-service, LIS 2.0

### Features

#### Technology
- Office 365 Mail/Calendar

#### Quality
- Parent Payment Portal
- Admitted Student Portal
- Banner 9 Portlet/Self-service, LIS 2.0

#### Ongoing
- AMS Upgrade Campaign, Tiered Services
- Quick Start Guide for “do it yourself” installs
- Ongoing 118N updates & new baseline language bundles.
  Existing bundles as of LP 5.0.4 include Arabic, English, French, Portuguese, and Spanish.

### Ongoing Each Release:
- accessibility, APIs, defect fixes

### Quality

- Automate external system SSO
- Increase portal deployment success

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## Portal Roadmap Highlights

<table>
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</thead>
<tbody>
<tr>
<td><strong>Baseline support for multi-entity processing</strong></td>
<td>▪ Help institutional consortia manage costs by servicing multiple entities utilizing one portal instance</td>
</tr>
</tbody>
</table>
| **Applications that leverage unique portal capabilities** | ▪ Enables customers to leverage existing portal investment and extend unique portal value to other key areas such as mobile and recruiting and retention  
  ▪ Increased customer satisfaction by enabling customers and partners to build software services on top of portal platform |
  - Services based Banner ERP integration  
  - Office 365  
  - Mobile-Portal applications (i.e., TA m-app)  
  - Increased release of APIs and web services  
  - Admitted Student Portal  
  - Parent Payment Portal |
| **Liferay portal server framework upgrades** | ▪ Simplified usability, reduced system complexity, and high availability = thinner portal and quicker time to value  
  ▪ New features including deeper mobile support, new community and collaboration tools, and search |
Ellucian Mobile
Mobile Challenges Facing Institutions

**Audience**

- CIO/IT
- Admin/Acad. Depts.
- Exec. Leadership
- Students

**Mobile Challenge**

- Ability to support a mobile solution that does not require extensive funding
- Provide personalized and easy access to a greater number of campus services
- Ability to apply brand support and control across a mobile solution
- Ability to use my mobile device to access key campus and course information
- Ability to easily support multiple device platforms without added complexity
- Provide easy to use mobile technology and tools
- Effectively communicate through timely and meaningful interactions
Ellucian Mobile

- Ellucian is committed to providing mobile solutions to support higher education
- Ellucian is committed to playing a leadership role for mobile in the higher education community
- Ellucian will be making an announcement before the end of the year

In Short, we don’t just want to build a mobile application, we want to build mobile in support of Ellucian XE vision
Balance of the Portfolio
Balance of the Portfolio

- Leverage principles of the portfolio strategy
  - Facilitate coordinated cross-platform investment, development, delivery
  - Leverage ecosystem of solutions around administrative solutions to drive more value, capture economies of scale and lower TCO
  - Offer alternative delivery models to fit customers’ preferences for how to consume technology
Roadmaps Available for All Products
## Roadmap Highlights

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Highlight</th>
<th>Value</th>
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<tbody>
<tr>
<td>Financial Aid</td>
<td>Borrower-Based Aid Year (BBAY) Support</td>
<td>Ability for customers to aggregate loan limits based on borrower award year rather than traditional schedule academic year</td>
</tr>
<tr>
<td>Finance</td>
<td>Self Service Improvements:</td>
<td>Ability for customers to improve scale and operational efficiency, increase accountability for budget management and spending to faculty and staff, while maintaining policy controls and authority management</td>
</tr>
<tr>
<td></td>
<td>• Requisitioning</td>
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<td></td>
<td>• Budget Status</td>
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<td></td>
<td>• Approval Processing</td>
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<tr>
<td>Human Capital Management</td>
<td>Employee Self Service Improvements:</td>
<td>Ability for customers to improve scale and operational efficiency, increase accountability for benefits, time management, and other human resources activities to faculty and staff, while maintaining policy controls and authority management</td>
</tr>
<tr>
<td></td>
<td>• Benefits Administration—</td>
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<td></td>
<td>• Electronic Personnel Action Forms (EPAFs)</td>
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<tr>
<td></td>
<td>• Web Time Entry</td>
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</tbody>
</table>
# Roadmap Highlights

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<tr>
<th>Functional Area</th>
<th>Highlight</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Process Management Tools and Services</td>
<td>Support for Banner XE and Luminis</td>
<td>Ability to quickly and flexibly automate business processes for better efficiency, cost savings, and consistency after they upgrade other integrated solutions like Banner XE and Luminis 5</td>
</tr>
<tr>
<td>Management Consulting</td>
<td>Developing cohesive expertise and solution frameworks to solve a focused set of specific problems, meeting market demand in high need areas facing the industry that meet market demand (tools, expertise)</td>
<td>Equipping customers with the tools so that they can execute plans with achievable accountability metrics – plan, transform and perform</td>
</tr>
<tr>
<td>Managed Services</td>
<td>Strengthening Flexible Support Services</td>
<td>Giving customers the ability to deliver a consistent student experience by centralizing service requests, expanding hours of service to accommodate online and working learners, and reducing response times to questions critical to their success.</td>
</tr>
</tbody>
</table>
Ellucian XE

Optimized

Agile

Evolutionary

Proprietary and Confidential

November 1, 2012
Thank You