BbWORLD 16

Assessing feasibility for your organization's transition to the SaaS deployment for Blackboard Learn

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Blackboard

#BbWorld16

Our Institution

- A fully-online and LMS-centric institution

- Centralized course development processes

- Extensive student outreach practices

- Decentralized student support model

- Robust data/reporting processes supporting operational, strategic, regulatory and compliance requirements

- 5- and 7- week overlapping course schedule tracks

- A rapidly-changing and integrated environment

- Managed Hosted (Diamond Engagement Plan) considering SaaS Advantage offering, Classic UX

A Future-Proof LMS

- **Is** one part of our comprehensive learning environment and student support ecosystem

- **Has** foundational attributes to support innovation in user experience and course delivery

- Next Generation Digital Learning Experience[1]

- Interoperable
- Accessible
- Mobile
- Leverages Data

- Self-Service
- Flexible delivery
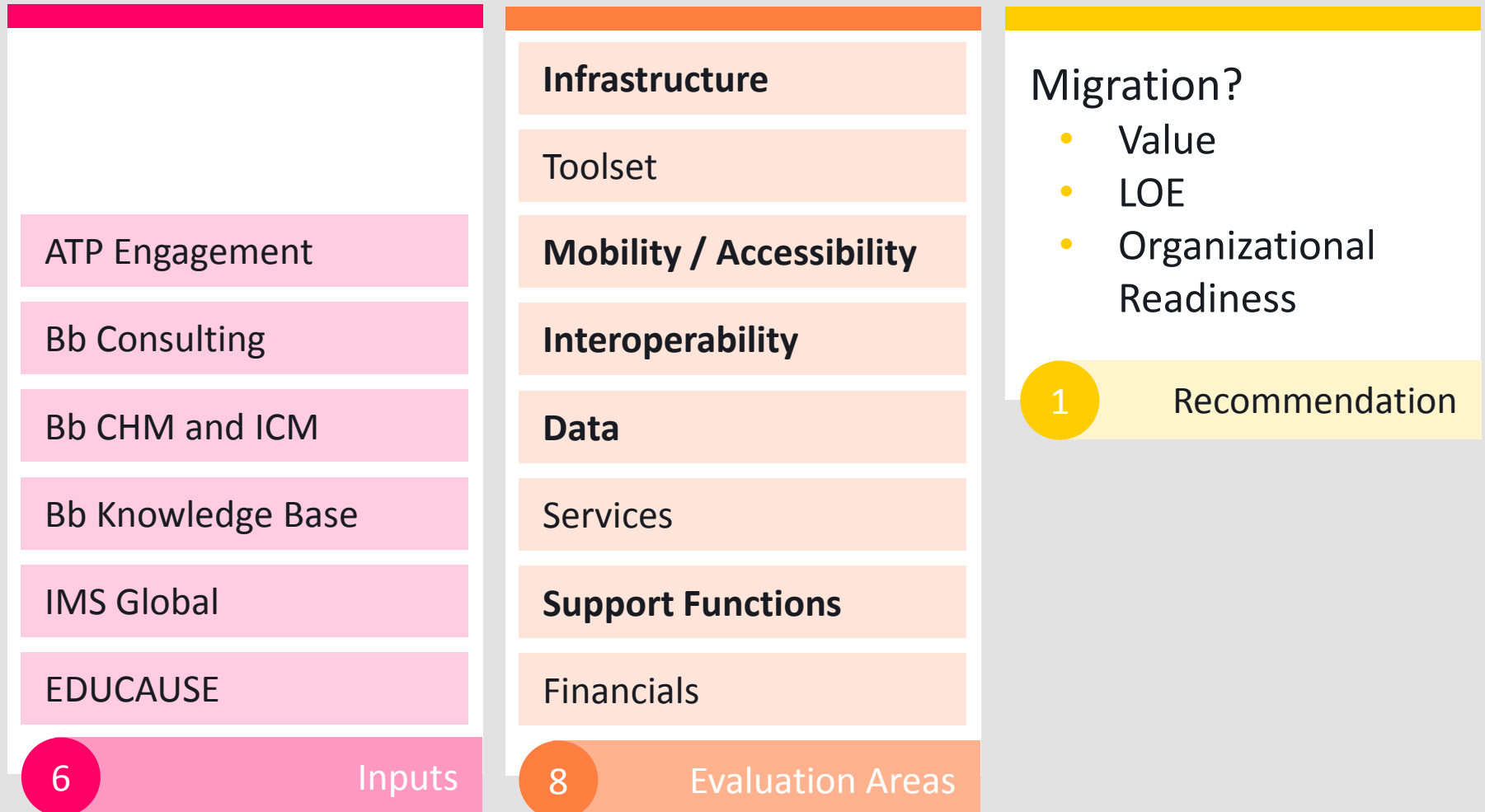- Scalable/Elastic
- Stable/Resilient

[1] https://net.educause.edu/ir/library/pdf/eli3035.pdf

Organizational Readiness to Change

Change can feel scary.

Our Method: Assessing Feasibility

ATP Engagement

Bb Consulting

Bb CHM and ICM

Bb Knowledge Base

IMS Global

EDUCAUSE

6 Inputs

Infrastructure

Toolset

Mobility / Accessibility

Interoperability

Data

Services

Support Functions

Financials

8 Evaluation Areas

Migration?
- Value
- LOE
- Organizational Readiness

1 Recommendation

A Few Words About Bb Learn Ultra

- SaaS is the pathway to Bb Ultra and an improved mobile experience – key for consideration

- No toolset parity between Bb Learn Classic and Ultra

- Portal framework (tabs/modules) not available in Bb Learn Ultra. An alternative will probably be in place later to address student-facing resource areas within Bb Learn

- No native support for the B2 framework in Bb Learn Ultra. Think about your ecosystem. LTI support available within courses but cannot be rendered in-line.

A desirable LMS offers a flexible, scalable, stable, and measured service environment.

Material to this are an infrastructure and a Service Level Agreement (SLA) that support our current needs and long-term strategy with a low level of risk.

Infrastructure

The Infrastructure criterion assesses hardware, networking, storage, and software components and properties; SLA; and security measures offered by the LMS vendor.

Infrastructure

Flexibility
- Virtualization and automation: Provisioning and update with zero scheduled downtime

Scalability & Elasticity
- Easily scale horizontally/vertically
- Clusters expand elastically based on load/demand

Resilience
- Self-healing environment: End-to-end automation and comprehensive monitoring

AWS
- A private tenant for Plus/Advantage customers
- Replication of App and DB across multiple instances

Datacenters
- 7 managed hosting Datacenters in 4 continents
- A modern cloud computing architecture

SLA
- Availability as only metric: 99.9%
- Faster disaster recovery

A desirable LMS offers a toolset meeting requirements of IT administration and operations workflows. Dedicated support resources are available for advocacy and continuity. Internal and external staffing is considered.

There is an active, engaged, largely positive and collaborative community that shows enthusiasm for extending the product via available avenues.

Support Functions

Support Functions

Vendor Support
- 3 tiers of SaaS deployment (different levels of service and customization)
- POCs won't change
- SOPs may change

Change Management
- Flexible Deployment: 2 annual releases (1 required)
- Continuous Delivery: 2-week cadence
- Partner/ICM → Customer Staging → Customer Production
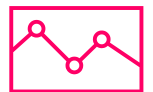- Test is always on Continuous Delivery

Client Staffing
- Additional LOE per faster release cycle

Administration
- No 1-off patches
- SDM installs B2s, coordinates Stage Refresh
- Time from request > action > execution ?

A desirable LMS provider recognizes mobile technology as an integral part of learners' daily lives.

The LMS is designed to present a strong mobile user experience via supporting seamless workflows, easy integration of 3rd-party mobile functionality, persona-targeted functionality, and reasonable parity with features presented in the browser.

Accessibility is a primary consideration.
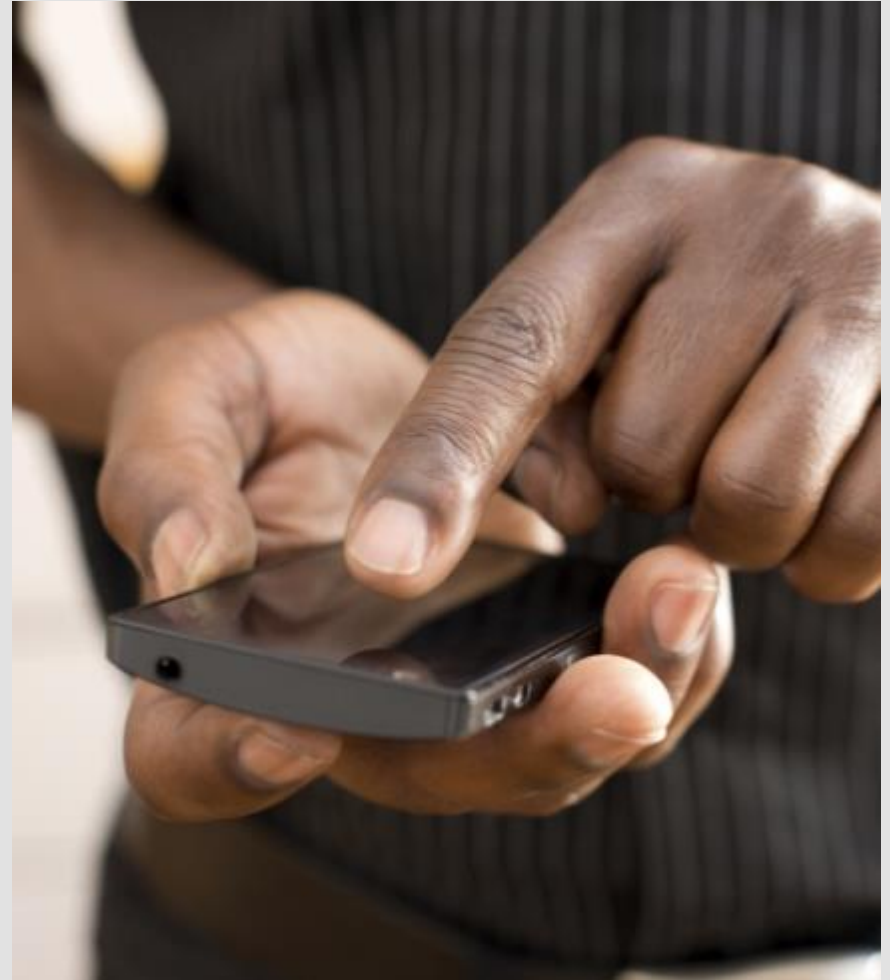
Mobility and Accessibility

Mobility and Accessibility

SaaS is the path toward improved mobile experience

- Responsive theme (Q2 2016)

- Bb Learn Ultra ✓

- Roadmap for incorporation of key features – SCORM

- Accessibility compliance of new theme, app, or Ultra experience **?**

A desirable LMS is one piece of a comprehensive learning environment and student support ecosystem, and has foundational technical attributes to support innovation in user experience and course delivery.

The Interoperability criterion evaluates compliance with industry standards and specifications for tool/data integration, and describes an inventory of vendor-proposed methods and mechanisms for achieving interoperability.

Interoperability

Interoperability

Building Blocks

- No root access

- Custom tables require a PK column

- No more shared file system location

- Consolidated log files

- Session variables no longer exist

- Recompile for Java 8

- Think about server failover

Commitment

- Largest LMS Dev. community[1]

- Full LTI, web services, B2, and REST API

SIS Integration

- SIS Framework is required

- End point changes

Standard Adherence

- First LMS platform Caliper-certified[1]

- Involvement in LTI 2.0 standard development

- Authentication standards (SAML 2.0)

[1] blog.blackboard.com/bill-ballhaus-and-blackboard-4-0

A desirable LMS supports requirements for integration with the Learning Environment, including critical operational processes.

The learning environment will continue to be the key source of record for learning data, and will expose those data in formats which are robust, timely, consumable, and flexible.

Technologies for data exposure will support operational processes, institutional reporting, and analytics.

Data

Data

PostgreSQL
- Syntax changes
- Implications for B2s

REST API
- Courses, Data Sources, Memberships, Terms, Content, Gradebook, Group Assignments
- Roadmapped for 9.1

Change Management
- No support for command line tools
- Update reporting and custom B2 solutions

Client Staffing
- Oracle to PostgreSQL skillset

Direct Data Access
- Schema changes may impact reporting or integration
- Near real-time updates
- New tools for access data and ETL processes

help.blackboard.com/Learn/Administrator/SaaS/Integrations/Direct_Data_Access#Open_database_documentation
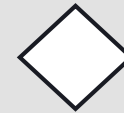
Next Steps for Our Insitution

1

In partnership with Blackboard, internal teams, and 3p vendors
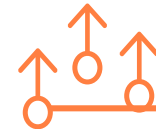## Assess readiness of integrated functionality

2

In partnership with Blackboard, internal teams, and 3p vendors
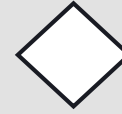## Estimate Migration LOE and Cost

3

Full Database

Course-Based
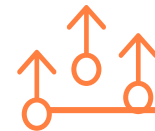
Determine Migration Path

Blackboard

Next Steps
for Our Institution

Migration Path

Full Database

- Clone current database and file system
- Restore the information to a new SaaS instance
- Requires downtime (varies by institution size)
- Maintains existing data, configurations, and settings

Course-Based

- Start with a fresh SaaS instance
- Selected courses brought over via archive/restore
- Limits migration downtime
- Configuration and settings are not brought across

Next Steps for You

Rachel Scherer

Marcos Montero

tinyurl.com/j6gua5t
Grab Project Artifacts

Ask Questions

Deep dive on administration and management of a complex, highly-integrated learning environment

Wednesday, 4:35 PM Venetian I
Attend Risky Business: 100% Uptime

help.blackboard.com
Read About SaaS

tinyurl.com/j6gua5t
See Other Projects

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