Agenda

• What is ALM?
• Importance of ALM
• Processes of ALM
• Making ALM a part of the organization
What is ALM?

Application Lifecycle Management covers the entire history of an application, utility, component or software solution, from the initial idea to its removal from an organization’s systems.
What is ALM?

The Software Development Life Cycle (SDLC) is part of ALM – but it's not the whole thing.
What is ALM?

The Software Development Life Cycle (SDLC) is part of ALM – but it's not the whole thing

ALM extends on both ends of SDLC
IT Asset Management

Information Lifecycle Management

• Information life cycle management (ILM) is a comprehensive approach to managing the flow of an information system's data and associated metadata from creation and initial storage to the time when it becomes obsolete and is deleted (techtarget, 2010)

Hardware Asset Management

• Hardware asset management entails the management of the physical components of computers and computer networks, from acquisition through disposal (wikipedia, 2010)

Service Lifecycle Management

• The three processes within life-cycle management — service portfolio management, service consumption, and service creation — manage the planning, definition, development, and use of services (forrester, 2008)
IT Asset Management

Application Lifecycle Management

- An application’s lifecycle includes the entire time during which an organization is spending money on this asset, from the initial idea to the end of the application’s life (Chappell, David, 2008)
- The conscious planning and management of implemented applications and software components which enable efficient and effective business processes throughout the enterprise (Ballas, 2010)
Importance of ALM

Management of business assets requires knowing what assets you have, their usage patterns and owners, and whether they are satisfying business needs.

Cost reduction frees up capital and funding for improvements and innovations.
ALM and Portfolio Management

ALM is an integral part of IT portfolio management

Portfolio management

• tied to the company’s strategic goals
• allows both IT and business managers to better communicate and meet the company’s overall corporate strategy
• centralizes management of asset information, processes and planning
Lifecycle Management

The ITIL approach starts with a service portfolio

Service portfolio management consists of four major steps:

- **Define**: Collect information and inventories of existing services. Establish the requirements for the requested service, and establish the business case for implementing the service.
- **Analyze**: Review the long-term business goals, and determine what services are required to meet those goals. Then analyze the requested service for financial viability, operational capability and technical feasibility to determine how the organization is going to get there.
- **Approve**: make a decision to retain replace, renew or retire the services.
- **Charter**: Communicate action items to the organization to implement approved service, and allocate budget and resources.

(BMC, 2008)
Lifecycle Management

Business processes undergo constant re-evaluation – but not so with deployed applications

Applications remain constant while business processes change around them
Implementing ALM for Applications

Governance covers the entire lifecycle
Governance - First Steps

- Align IT goals with business goals
- Understand regulations and standards
- Determine where policy is needed
- Create policy
Business Drivers

1. Align IT goals with business goals

Business goals drive how business processes are enabled to traverse the value chain

If the business has a ‘stay the course’ strategic philosophy, the IT goals should focus on stability and scalability.

If the business has a focus on innovative thinking and exploration of emerging markets, IT goals should focus on agility and efficiency.
Industry Compliance

2. Understand regulations and standards

Learn the impact of regulations on your market
- Sarbanes-Oxley
- FERPA (Family Education Rights and Privacy Act)
- HIPAA (Health Insurance Portability and Accountability Act)

Understand industry standards as they are applicable to your organization
- ITIL (Information Technology Infrastructure Library)
- WS-* (Web service standards)
- HITSP (Healthcare Information Technology Standards)
Business Process Analysis

3. Determine where policy is needed

- Review existing policy
- Identify gaps
- Identify out-of-date policy
4. Create policy

Policy informs the business WHAT needs to be done

In some cases, policy informs the business HOW to get it done

Policy implies top-down directives

Guidelines are not policies
Governance - Next Steps

Inventory
- Maintain accurate inventory of software assets

Lifecycle States
- Define application lifecycle states

Processes
- Define governance processes to manage state transitions

Compliance
- Insert governance processes into existing process flows
Inventory

5. Maintain accurate inventory of software assets

Know what you have
Know when it changes
Determine:
- Who owns it
- Who knows it
- Who uses it
- Its physical structure (deployment location, database, codebase, integration points)
- Its functional value
- Its cost to operate
# Application Fit

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<th>Business Goals</th>
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# Lifecycle States

**6. Define application lifecycle states**

Apply a state to each asset, based on their fit scores and their place in the development cycle.

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<th>Gartner</th>
<th>The Standard</th>
<th>Corporate Executive Board</th>
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<tr>
<td>New (under investigation, in development, or slated for future use)</td>
<td>New (conceived, in planning phase, under construction or newly deployed)</td>
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<td>Emerging (available for limited use in new implementations)</td>
<td>Emerging (in production or licenses have been purchased, but in limited use, such as a pilot)</td>
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<td>Mainstream (strongly recommended for new implementations)</td>
<td>Mainstream (in production and actively being used)</td>
<td>Promote (newly deployed or no replacement planned for near- or mid-term)</td>
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<td>Containment (installed and still requiring support)</td>
<td>Containment (in production for a specific or limited purpose)</td>
<td>Contain (replacement project conceived or in planning phase)</td>
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<td>Retirement (installed and scheduled for retirement)</td>
<td>Sunset (in production with scheduled retirement in progress)</td>
<td>Sundown (replacement project planned or in process; application will be retired)</td>
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<td>Prohibited (no longer used)</td>
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7. Define governance processes to manage state transitions

Identify where states would change (transition points)

Identify the governance which occurs at each transition point
  WHO has a say (stakeholders)
  WHAT factors determine whether the transition occurs (decisioning)
Compliance

8. Insert governance processes into existing process flows

1. Identify business processes in place around each transition point
2. Build a governance process to be integrated with the existing processes
   OR
3. Modify the existing processes to include governance activities
Retiring Applications

Its easy to grow – its hard to shrink

Applications by Age

- Older than 10 years: 25%
- Newer than 3 years: 22%
- Between 3 and 10 years: 53%

Corporate Executive Board, 2009
Retiring Applications

Steps you can take to retire an application

1. Identify indicators for when an asset should be retired (you did this in step 7 above)
2. Identify functional gaps to be filled once the app is retired
3. Initiate projects to build out functionality as needed
4. Integrate timelines for implementation of needed functionality and retirement of application
5. Follow-through
   ▫ Create migration strategy
   ▫ Provide incentives to business to remove app
   ▫ Get buy-in from PMO to finish retirement project
   ▫ Document business process changes in addition to technical documentation
Instilling ALM into the Organization

Portfolio Roadmap

Map out retirements and new implementations as part of the portfolio planning process

Strategic roadmaps manage application and technology plans as well as business plans
Questions?