The Unique Alternative to the Big Four®

Identity and Access Management

Crowe®
Agenda

• Introductions
• Identity and Access Management (I&AM) Overview
• Benefits of I&AM
• I&AM Best Practices
• I&AM Market Place
• Closing Remarks
Introductions

Crowe

- Kevin Wang, Manager
- kwang@crowechizek.com

Solutions Experience

- Directory Infrastructure (Microsoft, SUN, Novell)
- Identity Management (Oracle, SUN, Novell)
- Web Access Management (CA, SUN)
- Virtual Directory (Radiant Logic)
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What is Identity Management (IdM)?

IdM manages an identity’s lifecycle through a combination of processes, organizational structure, and enabling technologies.
What is Access Management (AM)?

AM primarily focuses on **Authentication and Authorization**.

<table>
<thead>
<tr>
<th>Authentication</th>
<th>Authorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any combination of the following 3 factors will be considered as Strong Authentication:</td>
<td>2 primary forms of Authorization:</td>
</tr>
</tbody>
</table>
| • **What you know**
  - Password
  - Passphrase | • **Coarse-Grain**
  - High-level and overarching entitlements
  - Create, Read, Update, Modify |
| • **What you are**
  - Iris
  - Fingerprint | • **Fine-Grain**
  - Detailed and explicit entitlements
  - Based on factors such as time, dept, role and location |
| • **What you have**
  - Token
  - Smartcard |
Identity and Access Management are **tightly coupled** by the governance and consumption of identity data.
Typical IT Architecture

- Multiple Identity Stores (5)
- Multiple Administration Points (4)
- Redundant data synchronization and replication
- Users must authenticate to each application
I&AM Architecture

- Single Identity Store
- Ability to present multiple data views
- Single Administration Point
- Reduced replication and synchronization
- Single Sign-On
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Current Challenges with I&AM

The following are excerpts from a recent InformationWeek\(^1\) article:

- “64% of respondents say they have **deployed an identity and access management system (IAM)**”
- “Almost 60% of respondents say their companies are **unable to effectively focus IAM controls** on areas of the greatest business risk”
- “58% of companies studied still rely on **manual controls** to audit and control user access to critical enterprise systems and data resources, leaving networks open to privacy breaches, failed audits, and potential fraud or misuse of data”
- “51% take a **reactive approach** to security issues”

Identity Management Drivers

- **Regulatory Compliance**
  - SOX
  - GLBA
  - HIPAA

- **Efficiencies**
  - Productivity Loss
  - Excessive Administration points

- **Cost Savings**
  - Password resets
  - Centralized reporting/attestation

- **Security**
  - Rogue users (de-provision accounts)
Higher initial cost of implementing and deploying an I&AM solution compared to maintaining existing processes and tools.

However, over a period of time:
- Maintaining existing tools for managing identities will increase in costs.
- The deployment of I&AM will reduce costs.
Burton Group – Current Customer Demands (IdM)

- Role management
- Identity audit enhancements (e.g., attestation, approval workflow, reporting)
- Finer-grained entitlement management (SoD, AD group management, etc.)
- Web services (SOA)
- Helpdesk and service management integration
- Usability features (wizards, predefined templates, etc.)
- Connected system adapters (additions and enhancements)
- Performance and availability
- Workflow enhancements
- Delegated administration and self-service improvements
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I&AM – Myth vs Reality

Myth

The first step in an I&AM Program is to select a technology and design the solution.

Reality

Although this approach is common, so too is the outcome. Programs that do not begin with a comprehensive complete strategy often are over budget and behind schedule.

Moral

Understand business drivers, current state, future vision and requirements. Then perform a PoC to select the right technology.
I&AM – Myth vs Reality

**Myth**

Identity Management can do everything, including making you coffee.

**Reality**

Identity Management vendors all tout the capabilities and ease of their products. Unfortunately, after buying the product and the implementation begins, the organization finds out all the functionalities are custom developed.

**Moral**

An organization must accurately define use cases and requirements. Ask the vendor to do a PoC and document how all the functionalities were accomplished. Get in writing, what is out-of-the-box and what is custom developed.
**Myth**

“We’ve already completed a strategy.”

**Reality**

A complete strategy incorporates people, process and technology components and documents several key deliverables for the business. A strategy includes—at a minimum—a thorough current state analysis, future state vision, gap analysis, and I&AM roadmap.

**Moral**

An organization must accurately capture all the business drivers, current state, future state vision and gaps to document a roadmap. This strategy phase and deliverables are instrumental in building consensus from C-Level sponsors.
I&AM – Myth vs Reality

**Myth**

Involvement outside of IT is unnecessary.

**Reality**

Identity Management requirements come from the business. HR involvement is crucial to a successful solution that addresses internal employees, for example. Also, training and communication to the business is necessary for any I&AM solution to be accepted by users.

**Moral**

Communicate and involve all business areas before implementing an I&AM solution. There should be a representative from each business area to form a Steering Committee for the I&AM project and support from C-Level executives.
I&AM Solution Approach

A sound I&AM solution approach and design will reduce implementation risks and overall costs.

- Start with defining a solution roadmap and release schedule
- Begin consolidating identity data sources
- Normalize and clean-up identity data
- Evaluate organizational data and roles for access privileges and approval routing
- Design efficient request and approval processes
- Implement a technology that will accommodate the data, organization and processes with the most out-of-the-box functionalities
## I&AM Strategy Framework

<table>
<thead>
<tr>
<th>Assesses</th>
<th>Solutions</th>
<th>Roadmap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define business driver, organizational support and vision</td>
<td>Design solution architecture and select technology components</td>
<td>Develop solution roadmap with release schedule</td>
</tr>
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</table>

### Assess Activities
- Document business drivers and issues
- Understand current state of the organization’s security environment
- Define the future vision for the organization
- Analyze and build organizational awareness and support for the project

### Solution Activities
- Define solution requirements
- Develop a solution architecture to solve business issues
- Application prioritization
- Define the various solution components
- Vendor analysis and proof-of-concepts

### Roadmap Activities
- Define scope and timeline for the solution
- Determine a release schedule
- Determine resource allocation

### Assess Results
- Set of defined business drivers
- Gap Analysis
- Defined set of stakeholders and project sponsor
- Organizational support analysis

### Solution Results
- Documented business and technical requirements
- Solution BluePrint and Architecture
- Technology Selection

### Roadmap Results
- Documented Roadmap with release schedule, timeline and scope
- Estimated number and types of resources needed for each release
Functionality vs Identity Population

There needs to be a balance between the complexity of functionality releases and the deployment of the releases to an organization’s identity population.
I&AM Project Success Factors

I&AM solutions are **very complex and contain many moving parts**. Understanding the following elements will increase the success of an I&AM deployment:

- Executive Sponsorship (C-Level Execs) and Steering Committee
- Established Strategy and Roadmap
- Project Management (Managers w/Communication and Technical Skills)
- Skilled and Experienced Implementation Team
- Selecting the Right Technology Vendor
- Data Cleanup
- Getting a Quick Win
- Having Multiple Technical Environments (DEV, QA, STG, PROD)
- TEST, TEST, TEST
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Technology Adoption Lifecycle

Mapping of I&AM technologies to the Technology Adoption Lifecycle bell curve.

Innovators 2.5%
Early Adopters 13.5%
Early Majority 34%
Late Majority 34%
Late Adopters 16%

Identity and Access Management Presentation
Magic Quadrant for Web Access Management, 2H07

http://mediaproducts.gartner.com/reprints/ca/152046.html
Magic Quadrant for User Provisioning, 2H07

http://mediaproducts.gartner.com/reprints/oracle/150475.html
### Burton Group – Provisioning Market Segments

<table>
<thead>
<tr>
<th>Major brands</th>
<th>Regional or speciality</th>
<th>Boutique</th>
<th>Microsoft specific</th>
<th>Partner only</th>
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<tbody>
<tr>
<td>BMC</td>
<td>Beta Systems</td>
<td>ASG</td>
<td>NetPro Quest</td>
<td>EMC</td>
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<td>CA</td>
<td>Courion</td>
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Future of I&AM

- Faster adoption of I&AM solutions due to Web Services and SOA
- Role Based Access Control integration with Provisioning technologies
- Federation
- Consolidated suite of I&AM products
- Easier to implement and configure
- Componentization of I&AM functionalities via SPML, SAML, XACML and DSML
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The Bottom Line for IdM Implementations

What Identity Management **IS/SHOULD BE:**
- A strategic initiative
- Process intensive
- 75% Focused on Process and Organization (25% Technology)
- Supported from the top (i.e. executive buy-in)
- Enterprise facing

What Identity Management **IS NOT/SHOULD NOT BE:**
- A technology only solution
- Tactical in nature
- Isolated to IT
Questions