Sustainable Skills: Accelerate Into The Future

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April 25, 2019
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Sustainable Skills
What some of our Mainframe customers are saying …

What does paradise look like?
✓ Sustainable workforce
✓ Agile workforce
✓ Transferrable Skills
✓ Highly accessible development environment
✓ Free up time for developing skills
✓ Faster time to market for customers – drive revenue

Risks
✓ Lack of growth
✓ Lack of uniform technology
✓ Weak onboarding
✓ CIO / CEO pressure to move off the mainframe
✓ Higher pay in mainframe

How do we get their faster?
✓ Common tools
✓ Think cross-enterprise
✓ Modern interfaces
✓ Microservices and APIs
✓ Simplify the mainframe platform
✓ Automation
✓ Training
✓ Mentoring
✓ Career roadmap
✓ Higher pay
✓ Create community

What’s in our way?
✓ Universities don’t teach Z
✓ Negative perception of the mainframe platform
✓ Value unknown
✓ Legacy architecture
✓ Legacy technology
✓ Time to value for mainframe training activities

Needs
✓ System programmers
✓ Application developers
✓ Deep skills
✓ Broad skills
Sustainable Skills
External factors that shape how we need to address the skills issue

Technology, Tools and Frameworks
User Experience and Personalization
Education and Enablement
Collaboration and Knowledge Transfer
## Business Challenge

<table>
<thead>
<tr>
<th>Customer context</th>
<th>Situational awareness</th>
<th>Customer delight</th>
</tr>
</thead>
<tbody>
<tr>
<td>All data, 360° view of the customer</td>
<td>All processes related to customer engagement</td>
<td>Personalization and value at every touchpoint</td>
</tr>
</tbody>
</table>

*70% of corporate data resides on mainframes*¹

*68% of C-suite executives surveyed expect organizations to emphasize customer experience over products in the future*²

*80% of consumers surveyed are more likely to do business with a company if it offers personalized experience*³

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2. Why CXOs believe customer experience is more important than tech in digital transformation. IBM 2018
Technology Challenge

Skill enablement imperatives in a hybrid & multi-cloud IT landscape

Inclusive infrastructure
Work across all environments using the latest technologies and architectures

Broadest and best skills
Holistic experience that takes into account their own preferences and needs

Continuous transformation
Innovate with advanced analytics, machine learning, automation, maximize resources
Skills Continually Evolve

Fast and furious: changing data and technology
Shift influenced by power of data, machine learning, AI
Drive skills and culture for business and personal success

Yesterday’s Standard

Hindsight
Reactive Actions
Insights / Reporting

Today’s Imperative

Foresight
Proactive Interaction
Automated Remediation
A Balanced Skills Strategy for Amazing Impact

Eliminate barriers without requiring expert skills
Increase automation to put less burden on your experts
Leverage data-driven solutions that make use of machine learning and AI

Innovate to SUCCEED
Drive OPPORTUNITY
Optimize EFFICIENCY
Strategic Enablers

Open Technologies

Customer Insights
Providing Opportunity for Hybrid IT Skills

Open
work with the latest technologies across all environments

Frictionless
simplified, seamless experiences accelerating time to market

Optimized
intelligence and automation that maximizes resources
Core Zowe includes API Mediation Layer, CLI, Web Desktop and z/OS services.

Vendors build ‘Zowe Compliant’ plugins that leverage the framework.
Visualization: The New UX

Unlikely

Less Likely

Most Likely

Metric

Time

Tasks ready to be dispatched

Typical

Volatility

Anomaly
Machine Learning Is The Way Of The Future

- Proactively Optimize Resources
  With Predictive Capacity Insights

- Boost Operational Efficiency
  With Unified Visualization & Correlation

- Reduce False Alerts
  Through Algorithmic Noise Reduction

- Drive Faster Root Cause Analysis
  With Service Analytics

- Anticipate Issues Earlier
  With Smarter Alarms
Helping You Create a Sustainable Workforce

Challenge
Growing skills is a huge concern as retirement reduces the available technical workforce

Solution
Broadcom trained and mentored technician augments your IT Staff to manage mainframe systems

Benefits
Simple, no cost solution to augment and enhance your mainframe skills
## Mainframe Vitality Program Pilot

### CA Datacom & CA IDMS Pilot 2019 – Future Expansion Sys Prog, Security, DevOps

### ATTRACT

**Supplement skills in the market**
- Broadcom to HIRE Mainframe Talent; Trained by SME’s; Made Available for Hire
  - Pilot with the Database Administrator Persona - expand later
  - Initial Focus on CA IDMS and CA Datacom Database Management

### GROW

**Partner with training specialist – THAT’S all of us… customers and vendors !**
- Develop and Deliver Specialized Training onsite at CA in Plano, TX
  - Boot Camp - Mainframe Basic Training & Advanced DBA
  - Residency: Assign Rotational field work at customer sites (with mentors)
  - Make Graduates Available for Hire - Priority to Residency Host

### RETAIN

**Supervised learning to ‘harvest’ institutional knowledge**
- Customers as Training Partners for engagement / mentorship on site
  - Health Checks, Learn infrastructure/applications
  - Production monitoring, performance and operational reviews
- SELECT CUSTOMERS: No or Low Cost for Training and Onsite programs
# Time to Value: Building a Datacom or IDMS DBA

<table>
<thead>
<tr>
<th>Broadcom Hired</th>
<th>Customer Hired</th>
<th>Site Engagements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Broadcom Hires</strong> qualified resources for admin/ops role (Create a bench of skilled DBA’s)</td>
<td><strong>1. Customer Hires</strong> for admin/ops role. Comply with corp. security, regulatory or salary restrictions.</td>
<td><strong>1. Leverage Broadcom Database Field team, support a unique project need; conduct infrastructure health check.</strong></td>
</tr>
<tr>
<td><strong>2. Trained by Product Experts</strong> on Mainframe Bootcamp &amp; DBMS in onsite class at Broadcom.</td>
<td><strong>2. Customer sends this employee to Broadcom Training by Product Experts in North America</strong></td>
<td><strong>2. Establish Tighter Relationships; Direct connection with product experts. Define projects for existing or future personnel.</strong></td>
</tr>
<tr>
<td><strong>3. Customer Partnership for Field Residency &amp; Mentorship:</strong> Collocate Broadcom employee at customer site with customer assigned mentor to do unique knowledge transfer. (Note: Requires dedicated commitment by customer to train and hire)</td>
<td><strong>3. Employee returns to Customer with short term field support assistance &amp; mentorship from Broadcom.</strong></td>
<td><strong>3. Customer Benefits directly from database management best practices, performance tuning, health checks and upgrade support.</strong></td>
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<tr>
<td></td>
<td><strong>4. Established relationships with product experts; deliver best practice and recommendations.</strong></td>
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Longest time to value ………………………………………………………………………………………………… Shortest time to value
Just a step away from Mainframe talent sourcing and training!

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<tr>
<th><strong>Mainframe Academy</strong></th>
<th><strong>Web-based &amp; Instructor-Led Training</strong></th>
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<tbody>
<tr>
<td>▪ 6 week curriculum on core systems programming skills (z/OS, TSO, JCL) both Instructor-led and self-paced</td>
<td>▪ Web-based versions for self-paced convenience</td>
</tr>
<tr>
<td>▪ Learning Roadmap and Certification Exams</td>
<td>▪ CA product-based courses taught by subject matter experts, upon request</td>
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<th><strong>Associate Software Engineering Program</strong></th>
<th><strong>Mainframe eLearning Library</strong></th>
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<tr>
<td>▪ 7 weeks of intensive in-person mainframe training</td>
<td>▪ Product and vendor-agnostic training</td>
</tr>
<tr>
<td>▪ For recent graduates entering mainframe or experienced professionals seeking a career change</td>
<td>▪ Earn official IBM Skills Credentials</td>
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<th><strong>Vitality Program</strong></th>
<th><strong>Videos &amp; eBooks</strong></th>
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<td>▪ 8 – 12 week instructor-led mainframe residency program</td>
<td>▪ Quick, targeted, task-focused training on-the-go</td>
</tr>
<tr>
<td>▪ Pilot 2019 (CA Datacom; CA IDMS)</td>
<td>▪ Best practices and “how-to” content optimized for mobile viewing</td>
</tr>
<tr>
<td>▪ Training continues onsite at your location, with potential for full-time hiring by you</td>
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For more information, please contact Lauren Valenti (lauren.valenti@broadcom.com)
The Future of Innovation Thrives in Community

Make it easier to interact with technology

Apply skills in one area to another

Educate people on the platform

Mentor and cross-train
Thank You