Avaya Video-Enabled Learning Solutions for Education

Maryland Education Enterprise Consortium

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Agenda

• Industry and Education Technology Trends

• Avaya Video-Enabled Learning Solution

• Why Avaya?

• Summary
Industry and Technology Trends

Tough economy, student achievement, student engagement, retention rates, and graduation rates

- Economy and Budgets
- Student Achievement
- Hybrid/Blended, Virtual, Online Learning, Flipped Classroom
- Mobile Learning, 1:1, BYOD
- Cloud
- Video, Virtual World and Communities
Video Market Trends

- Video soft clients growing at 340% through 2015
  Source: Gartner 2011

- Desktop video growing at 13.6% - 2015
  Source: Wainhouse, 2011

- Conference room video growing at 5.5% through 2015
  Source: Wainhouse, 2011

- Video Related Services grow 15.5% 2015
  Source: Gartner, 2011

Desktop video is driving the significant growth due to video soft clients and the need to be mobile
Desktop and Mobile-enabled Video Expands Learning Opportunities

Today

Traditional Video Conferencing

Expanded Access, More Personalized, More Mobile

Video Collaboration
Video in Education by Pedagogical Purpose

**Instructional Activities**
- Live Distance Instruction
- Face-to-Face Instruction
- External Content Access
- Access to Field Experts

**Real-Time & On Demand (Blended) Activities**
- Collaborative Learning
- Learner-to-Learner
- Student Research
- Research Collaboration between Faculty

**Administrative Activities**
- Meetings
- Collaboration
- Professional Development
- Emergency response
- Inclement weather

Source: Wainhouse Research “Matching Distance Education and e-Learning Technologies to Pedagogical Goals, April 2011, WR-EDU-WP11-01

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Use Cases

Higher Education

- Academic collaboration and research: 63% PC/Web-based, 64% Group/Classroom Video Conferencing
- Meetings: 77% PC/Web-based, 89% Group/Classroom Video Conferencing
- Accessing content experts/virtual fieldtrips: 38% PC/Web-based, 52% Group/Classroom Video Conferencing
- Professional/staff development and training: 59% PC/Web-based, 79% Group/Classroom Video Conferencing
- Student-only collaborative based learning: 36% PC/Web-based, 30% Group/Classroom Video Conferencing
- Instruction of locally-based learners: 28% PC/Web-based, 47% Group/Classroom Video Conferencing
- Direct instruction of students at remote campus or at home: 54% PC/Web-based, 86% Group/Classroom Video Conferencing

Source: Distance Education and e-Learning Metrics Survey 2011, Wainhouse Research, RE-EDU-SURV11

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Use Cases

K-12, Primary/Secondary Education

- **Academic collaboration and research**
  - PC/Web-based: 27%
  - Group/Classroom: 33%

- **Meetings**
  - PC/Web-based: 67%
  - Group/Classroom: 64%

- **Accessing content experts/virtual fieldtrips**
  - PC/Web-based: 33%
  - Group/Classroom: 56%

- **Professional/staff development and training**
  - PC/Web-based: 57%
  - Group/Classroom: 72%

- **Student-only collaborative based learning**
  - PC/Web-based: 17%
  - Group/Classroom: 36%

- **Instruction of locally-based learners**
  - PC/Web-based: 27%
  - Group/Classroom: 42%

- **Direct instruction of students at remote campus or at home**
  - PC/Web-based: 23%
  - Group/Classroom: 61%

Source: Distance Education and e-Learning Metrics Survey 2011, Wainhouse Research, RE-EDU-SURV11
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Collaboration

Enhanced communications that eliminates device and media dependencies and enables users to collaborate using their own set of tools from anywhere to harness the collective intelligence of all users to drive innovation.

**Right People**
- Any Device
- Any Location
- Any Modality
- Any Network
- Contact Driven

**Right Information**
- Relevant, Instant Access
- Visual: Human Element
- Contextual Analytics
- Any Source, Any Format
- Filtered, Prioritized
- Portable, Accessible

**Right Time**
- Available Anytime
- Circumstance Appropriate
- Work Assignment Driven
- Workflow Integrated
Avaya Video-Enabled Learning Solutions

- Advanced collaboration capabilities
- Best video performance in real world environments
- Simple to use
- Lowest TCO
- World class service and support
The Avaya Difference

1. VIDEO, SIMPLE AS A PHONE CALL
2. BEST PERFORMANCE OUTSIDE CORPORATE NETWORK
3. COMPREHENSIVE SOLUTION – OUT OF THE BOX
4. MULTI-VENDOR VIDEO INTEROPERABILITY
5. FLEXIBLE PURCHASE AND DEPLOYMENT CHOICES
6. GLOBAL AVAYA PROFESSIONAL SERVICES
Avaya Radvision Portfolio

- Highest quality room system, desktop and mobile solution
- The most flexible and affordable telepresence system
- Simple, affordable solutions for all size businesses.
- Comprehensive management application
- Open standards: Interoperable with most vendor systems
Desktop and Mobile Solution Benefits

- Invite anyone to your meeting
  - No firewall or licensing hassles
- Real productivity
  - Share documents
  - Catch up without interrupting
  - Excellent meeting controls
  - Integrates with enterprise
- Great performance
  - Optimized for use over public networks
The Market’s Highest Quality Room System

- Amazing user experience
- Best video performance
- Faster, better performance for international calls
- Intuitive iPad control
- Quiet, streamlined industrial design
The Most Flexible & Affordable Telepresence

- Adapts to any design
- No restrictive room sizes
- 1/3 cost of competition
- Highest interoperability
Comprehensive Management Application

- All-inclusive solution
- Broad 3rd party client support
- Patented MCU virtualization
  - Virtual rooms
- Extensive enterprise integration
Unified Communications (UC) Integration

Core UC integration:
- Investment protection
- Interoperability

Support for:
- Avaya Aura® Solutions
- Microsoft Lync
- IBM Sametime
- ALU MyTeamwork
Avaya Radvision Scopia®

SMART Board Integration
Connecting the World of Video
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Factors in Choosing Desktop Video Conferencing

- Audio and video quality: 71% (Higher Education), 65% (K-12, Primary/Secondary)
- Apple Mac compatibility: 44% (Higher Education), 31% (K-12, Primary/Secondary)
- Interoperability with classroom systems: 42% (Higher Education), 31% (K-12, Primary/Secondary)
- H.239 / content sharing: 34% (Higher Education), 19% (K-12, Primary/Secondary)
- No need to download or install software clients: 27% (Higher Education), 19% (K-12, Primary/Secondary)
- Archiving: 23% (Higher Education), 15% (K-12, Primary/Secondary)
- Same vendor for classroom videoconferencing: 21% (Higher Education), 12% (K-12, Primary/Secondary)
- Availability of High Definition desktop camera: 21% (Higher Education), 12% (K-12, Primary/Secondary)
- Integration with unified communications software: 23% (Higher Education), 20% (K-12, Primary/Secondary)
- Management and reporting software: 23% (Higher Education), 19% (K-12, Primary/Secondary)
- Web 2.0 social networking features: 19% (Higher Education), 14% (K-12, Primary/Secondary)
- Other: 19% (Higher Education), 10% (K-12, Primary/Secondary)

Source: Distance Education and e-Learning Metrics Survey 2011, Wainhouse Research, RE-EDU-SURV11
## Why Avaya?

**Answer:** Leading Feature-rich Price-Performance UC-Independent Solution

<table>
<thead>
<tr>
<th>Feature</th>
<th>Cisco</th>
<th>Polycom</th>
<th>LifeSize</th>
<th>SCOPiA®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual 1080p 60fps Room</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>H.264 High Profile / SVC</td>
<td>✗ / ✗</td>
<td>✓ / ✗</td>
<td>✗ / ✗</td>
<td>✓ / ✓</td>
</tr>
<tr>
<td>iPad Control of Conference</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Embedded Room MCU</td>
<td>4 Sites</td>
<td>4 Sites</td>
<td>8 Sites</td>
<td>9 Sites</td>
</tr>
<tr>
<td>Integrated SMB Solution</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>PC/Mac Desktop Client (Firewall traversal/ free distribution)</td>
<td>✗ / ✗</td>
<td>✗ / ✗</td>
<td>✗ / ✓ (messy)</td>
<td>✓ / ✓</td>
</tr>
<tr>
<td>A/V/D Mobile Client (iOS, Android, Smartphone, Tablet)</td>
<td>Jabber - iPad WebEx - all</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3rd Party Endpoint Mgmt.</td>
<td>✓</td>
<td>Only PLCM</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Telepresence Interop.</td>
<td>Only Cisco</td>
<td>Only PLCM</td>
<td>Only LifeSize</td>
<td>✓</td>
</tr>
<tr>
<td>Virtualized MCU Resources</td>
<td>Only Scheduled</td>
<td>Only Scheduled</td>
<td>✗</td>
<td>✓ Patented</td>
</tr>
<tr>
<td>Microsoft Qualified Gateway</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
</tbody>
</table>

* ✗ Not Supported  ✓ Supported
## Avaya Reduces TCO for Education

<table>
<thead>
<tr>
<th>Feature</th>
<th>Reduces TCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.264 High Profile Support for Room Systems</td>
<td>Requires 50% less bandwidth in some cases for same quality.</td>
</tr>
<tr>
<td>iPad Control for Room Systems</td>
<td>Intuitive design allows first-time users to run a conference without IT support.</td>
</tr>
<tr>
<td>Free Desktop &amp; Mobile Client Distribution</td>
<td>Competing solutions require a license key even for casual and one-time users.</td>
</tr>
<tr>
<td>Embedded Firewall Traversal</td>
<td>Most competitors require a separate server for firewall traversal</td>
</tr>
<tr>
<td>Flexible MCU Resources</td>
<td>Unlike competing systems, SCOPiA Elite’s resource model sends only as much data as the endpoint can use, significantly lowering bandwidth costs</td>
</tr>
<tr>
<td>HD Room System Cost</td>
<td>Scopia XT Room Systems typically cost 20% to 35% less than similar systems from competing vendors that typically have less functionality.</td>
</tr>
</tbody>
</table>
Avaya solution benefits to Education

**Instructional Activities**
- Increases use of existing faculty to reach more students
- Learners are engaged with remote content and visual learning
- Support of local learners with content and experts
- Students like it
- Lower cost

**Real-Time & On Demand (Blended) Activities**
- Academic collaboration
- Greater mobility for faculty, administrators, and/or learners
- Administrators and faculty can meet without travel
- Ability for students to collaborate with peers anywhere
- Parent/teacher conferences
- Lower cost

**Administrative Activities**
- Improve productivity across geographically disperse teams
- Greater mobility for faculty, administrators, and/or learners
- Administrators and faculty can meet without travel
- Delivery of professional development
- Emergency response / inclement weather
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Video-Enable Learning with Radvision Scopia®
Complete Portfolio Spanning Telepresence, Classrooms, Desktop to Mobile
## Avaya Radvision Scopia® - Delivering Superior Capabilities demanded by Education

<table>
<thead>
<tr>
<th>Key Factors</th>
<th>Avaya Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Video Quality</td>
<td>High quality, high definition, bridges H.323 and SIP environments</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>Great User Experience = Easy for students, faculty and staff to operate</td>
</tr>
<tr>
<td>Cost Effective</td>
<td>Market Leading Price, Performance and Scalability</td>
</tr>
<tr>
<td>Interoperable</td>
<td>Full Interoperability with Video Conferencing Room Systems and Telepresence</td>
</tr>
<tr>
<td>Content Sharing</td>
<td>Room system compatible data collaboration (H.239) with Content ‘Slider’ to review previously presented content without interrupting the presenter</td>
</tr>
<tr>
<td>Mobile, BYOD</td>
<td>Much More Than an Endpoint on Mobile Devices and Desktop Clients…Moderate, Invite, Control</td>
</tr>
</tbody>
</table>
Summary

- Major industry transformation
- More than 5,000 education customers worldwide have deployed communications solutions from Avaya
- Avaya is ready to meet your video-enabled learning needs today.

THANK YOU!
Case Studies

Western Reserve University
University of Houston
REANNZ
Michigan’s Regional Educational
FCCN
Illinois Century Network
Central Queensland University
ETH Zurich
Piemonte University
Erasmus University Rotterdam
OBEC
Problem

- Distance learning and day-to-day video conferencing between remote sites is mission-critical
- Needed to be easy to use and support heavy usage
- Integrate seamlessly with existing video assets and workflows
- Desktop connectivity and high definition support

Solution

- Avaya Radvision Scopia® Multipoint Conferencing Units (MCUs)
- H.323 Gatekeeper
- Scopia® Desktop
- iView™ ManagementSuite

University of Houston – Downtown (UHD) offers baccalaureate degrees in 48 areas and four master’s degree programs. Enrollment at the University has surpassed 12,000 students.

Results

- Seamless solution that extends advance video capabilities right to the desktop with Radvision infrastructure and Scopia Desktop.
- Transmit sessions using H.264, High Definition and H.239 without restrictions.

“The SCOPIA platform proved to be a robust package that encompassed reliable desktop conferencing, built-in firewall traversal and HD support.”

Steve Cachia, Manager for Video Network Services, UHD Division of Information Technology

Case Study: http://www.radvision.com/NR/rdonlyres/8DBAAF3C-C7D0-4F5F-A097-6CF449A298E1/0/UniversityofHouston_MKTDI23080901.pdf

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REANZ
RESEARCH AND EDUCATION ADVANCED NETWORK NEW ZEALAND

[Bar chart showing call data broken down by month and type]
Fundamental Shifts in Education Market

- The death of the lecture hall

- May 2012 issue
  COVER STORY
  John L. Hennessy: Risk Taker

- Stanford University’s president predicts the death of the lecture hall as university education moves online
True BYOD Experience
Radvision Scopia®

Live Demonstration