Using Virtual Environments for Leadership Development and Training
Overview

Effective leadership training initiatives are critical for organizational performance. Research indicates that organizations utilize a variety of content and delivery methods for such initiatives with varying success. With estimates of domestic organizational leadership training spending exceeding $2 billion annually, maximizing organizational return on investment (ROI) is an increasingly critical objective. By utilizing virtual environments in leadership training, organizations have the potential to address this goal by reducing costs and increasing training consistency. Thus, this research report provides a timely investigation into the use of virtual environments in leadership training initiatives.

In August 2013, one hundred and ninety-eight companies participated in a Training Industry, Inc. study on leadership training. The goals of the research were to not only determine the effectiveness of virtual environments in supporting leadership training initiatives, but to also:

- Provide estimates of the current and planned use of virtual environments to support leadership training initiatives,
- Identify the most common challenges faced when providing leadership training, and
- Determine best practices for incorporating virtual environments into leadership training initiatives.

In investigating the practices, tools and technology, and evaluation methods used by various organizations, this research report highlights differences between organizations that are considered effective and those that are considered ineffective at providing leadership training. Results of these comparisons can be used by leadership training decision makers to pinpoint opportunities for improvement within their own leadership training programs.

Definition

To help learning leaders develop a frame of reference for contributing to the study, the following definition of a virtual environment was provided.

A virtual environment is an interactive, computer-simulated environment that integrates virtual locations, webcasts, and social networking and web-based collaboration tools to create engaging learning experiences for a wide range of training programs.
Key Findings

• Sixty-three (63%) percent of learning leaders rated their organization’s leadership training initiatives as somewhat or very effective.

• The majority of leadership development initiatives last one week or less and include less than 50 participants.

• The leadership development initiatives of effective organizations were generally longer.

• Organizations invest an average of $270,301 annually in leadership training, which equates to an average annual investment of $684 per employee.

• The most commonly reported challenge in providing leadership training faced by organizations was sustaining the impact of training.

• Learning leaders whose organization used virtual environments were more likely to rate their organization as effective in providing leadership training.

• The majority of companies plan to use virtual environments for new hire onboarding, leadership training, and continuing professional education.

• Virtual environments were rated as most effective for delivering continuing professional education, product training, and IT training.
Effective companies...

- Invest approximately 44% more per employee in leadership training initiatives than ineffective organizations.

- Provide leadership training programs that last longer than those provided by ineffective organizations.

- Are more likely to use virtual environments as part of a blended learning solution than ineffective organizations.

- Frequently include individual assessments, introductory leadership courses, experiential learning, and pre-work e-learning in their leadership training initiatives.

- Are two to three times more likely to include experiential learning, pre-work/e-learning, team assessments, post-training coaching, and post-course assessments in leadership training than ineffective organizations.

- Frequently use emails, case studies, videos, webinars, short e-learning pieces, and other virtual tools and technology to support their leadership training initiatives.

- Are more likely to incorporate tools and technologies that allow for participant interaction in their leadership training initiatives.
Leadership Training Initiatives Descriptives

Leadership Training Effectiveness
When asked to rate the effectiveness of their organization’s leadership training initiatives, 63% of respondents rated their organization as very or somewhat effective (Figure 1). In contrast, 37% indicated that their company’s leadership training programs were somewhat ineffective or ineffective.

Figure 1

Throughout this report, the effective group is compared with the ineffective group in order to identify practices that differentiate effective and ineffective leadership training initiatives.
Program Duration and Size

Learning leaders were asked about the typical duration of their organization’s leadership training initiatives; the majority indicated that these initiatives last one week or less (Figure 2).

Figure 2

Notably, there was a significant positive relationship between duration and effectiveness ($r = .25, p < .001$), such that the longer the training initiative lasted, the more likely it was to be rated as effective. Seventy-eight percent (78%) of respondents whose company’s leadership and development programs lasted four months or longer rated them as effective, while 56% of respondents whose company's programs were less than four months rated them as effective (Figure 3).

Figure 3
Learning leaders were also asked about the typical size of their organization’s leadership training initiatives; the majority indicated that these initiatives include less than 50 participants (Figure 4). The average class size was slightly larger for organizations with more than 1,000 employees, with 80% reporting that their organization’s leadership training programs including between 11 and 50 participants.

Figure 4
**Investment in Leadership Training**

Learning leaders were asked to provide an estimate of the average investment that their organizations dedicate to leadership training initiatives. Respondents indicated that their organizations invest an average of $270,301 per year in leadership training development, which amounts to an average annual investment of approximately $684 per employee. For larger organizations (i.e., organizations with 1,000 or more employees), the per employee investment was lower. Further, a comparison of the effective and ineffective groups reveals that the effective group invested approximately 44% more per employee annually in leadership training than the ineffective group (Figure 5).

![Figure 5](chart.png)
Challenges in Leadership Training

Learning leaders were asked to indicate the most common challenges faced by their organizations when providing leadership training. Respondents most frequently cited sustaining the impact of training, limited resources, and evaluating training effectiveness as challenges (Figure 6). An interesting, yet perhaps unsurprising, finding relates to differences between relatively large organizations and smaller organizations. For respondents whose organization employed 1,000 or more employees, consistency across departments and regions was cited as the third most common challenge, with approximately 53% of these respondents endorsing consistency as a challenge.

Figure 6

- Sustaining the impact of training: 68%
- Limited resources (e.g., time, staff, budget): 57%
- Evaluating training effectiveness: 49%
- Ensuring leadership support/prioritization of training: 48%
- Consistency across departments and regions: 46%
- Defining proper evaluation metrics: 39%
- Ensuring that training content is relevant: 32%
- Delivering training to a globally dispersed workforce: 27%
- Facilitating engagement: 24%
Measuring Leadership Training Effectiveness

Learning leaders were asked about the importance of various assessment methods and analytics capabilities when measuring leadership training effectiveness. Figure 7 charts the frequency with which each method and capability was rated as very important. As can be seen, behavior transfer, return on expectations, measuring content relevance, and business impact were rated as the most important methods/capabilities for measuring leadership effectiveness.

Figure 7

- Kirkpatrick Level III: behavior transfer
- Return on expectations
- Measuring content relevance
- Kirkpatrick Level IV (excluding ROI): impact on business
- Measuring user participation/engagement
- Assessing overall user satisfaction
- Kirkpatrick Level II: learning
- Kirkpatrick Level I: participant evaluations/reactions
- Tracking the contributions of instructors or mentors
- Measuring networking, interactivity, and collaboration
- Tracking individual user activity

Percent of Respondents, N ranges from 185 to 196
Using Virtual Environments for Training

Included in Blended Learning Solutions

Learning leaders were asked about elements that are typically included when their organizations utilize virtual environments as part of a blended learning solution. Respondents who indicated that their organization uses virtual environments as part of a blended learning solution rated their organization significantly more effective in providing leadership training ($t = 2.27, p < .05$). As can be seen in Figure 8, approximately 71% of the effective group indicated that their organization uses virtual environments, whereas 58% of the ineffective group reported using virtual environments. Within organizations that utilize virtual environments, self-study online/e-learning, print or other support materials, and in-person instructor-led training were the most frequently included elements in blended learning solutions.

Figure 8

- **Use Virtual Environment**: 71% (Effective Group, N=112) vs. 58% (Ineffective Group, N=64)
- **Self-study online/eLearning**: 56% vs. 54%
- **Print or other support materials**: 53% vs. 54%
- **In-person instructor-led training**: 45% vs. 39%
- **Assessments**: 43% vs. 39%
- **Virtual instructor-led training**: 37% vs. 23%
- **Archived sessions**: 35% vs. 22%
- **Chat rooms/online forums**: 33% vs. 19%
- **Simulations**: 27% vs. 19%
- **Virtual coaching and mentoring**: 21% vs. 17%
- **Virtual work groups**: 20% vs. 14%
- **Social, collaborative software**: 19% vs. 11%
- **Wikis or knowledge repositories**: 17% vs. 18%
- **Podcasts**: 9% vs. 9%
- **Serious games**: 2% vs. 8%
Planned Use of Virtual Environments

Learning leaders were asked about the types of training initiatives for which their organizations planned to use virtual environments. The majority of respondents indicated that their organization planned to use virtual environments in the delivery of new hire onboarding, leadership training, and continuing professional education (Figure 9).

Figure 9

- New Hire Onboarding: 56%
- Leadership Training: 51%
- Continuing Professional Education: 50%
- Product Training: 45%
- Technical Skills Training: 44%
- IT Training: 43%
- Soft Skills Training: 43%
- Client/Customer Training: 40%
- Sales Training: 34%
- Partner Training: 17%
- Talent Acquisition: 11%

Percent of Respondents, N = 149
Effectiveness of Virtual Environments

Learning leaders were also asked to rate the effectiveness of virtual environments for delivering various training initiatives. Figure 10 charts the frequency with which respondents rated virtual environments as effective or very effective for delivering each type of training/development initiative. As can be seen, virtual environments were rated most effective for delivering continuing professional education, product training, and IT training.

**Figure 10**

<table>
<thead>
<tr>
<th>Training Initiative</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing Professional Education</td>
<td>90%</td>
</tr>
<tr>
<td>Product Training</td>
<td>82%</td>
</tr>
<tr>
<td>IT Training</td>
<td>79%</td>
</tr>
<tr>
<td>Technical Skills Training</td>
<td>76%</td>
</tr>
<tr>
<td>Client/Customer Training</td>
<td>73%</td>
</tr>
<tr>
<td>New Hire Onboarding</td>
<td>71%</td>
</tr>
<tr>
<td>Sales Training</td>
<td>66%</td>
</tr>
<tr>
<td>Partner Training</td>
<td>61%</td>
</tr>
<tr>
<td>Leadership/Management Training</td>
<td>61%</td>
</tr>
<tr>
<td>Talent Acquisition</td>
<td>60%</td>
</tr>
<tr>
<td>Soft Skills Training</td>
<td>55%</td>
</tr>
</tbody>
</table>

Percent of Respondents, N ranges from 167 to 187
Delivering Leadership Training

Included in Leadership Training

Learning leaders were asked about the elements that are typically included in their organization’s leadership training initiatives. Overall, individual assessments, introductory leadership courses, experiential leadership courses, and pre-work/e-learning were most frequently included. A comparison of the elements included by the effective group with those included by the ineffective group indicates that the effective group was twice as likely to use experiential courses and pre-work/e-learning and more than twice as likely to use post-training coaching and post-course assessments (Figure 11).

While less than half of all respondents indicated that their organization utilizes post-training features (i.e., post-work/e-learning, post-course learning assessments, and ongoing, post-training coaching or mentoring), results indicate that the effective group includes these features more often than the ineffective group. These findings are particularly relevant given the frequency with which sustaining training impact was cited as a challenge to providing leadership training.

Figure 11

- Individual assessments: 77% effective, 51% ineffective
- Introductory leadership courses: 74% effective, 63% ineffective
- Experiential leadership courses: 69% effective, 30% ineffective
- Pre-work/e-learning: 69% effective, 35% ineffective
- Specialized workshops: 62% effective, 39% ineffective
- Coaching or mentoring sessions: 61% effective, 37% ineffective
- Ongoing, post-training coaching or...: 40% effective, 15% ineffective
- Post-course learning assessments: 35% effective, 11% ineffective
- Customized group sessions: 32% effective, 17% ineffective
- Team assessments: 30% effective, 15% ineffective
- Post-work/e-learning: 26% effective, 15% ineffective

Effective Group, N=121  Ineffective Group, N=71
Tools to Support Leadership Training

Learning leaders were asked about the tools and technology used by their organizations to support leadership training. Overall, emails, case studies, videos, and webinars were reported as the most frequently used. In addition, several large differences between effective and ineffective groups are apparent (Figure 12). The effective group was twice or almost twice as likely to use social networking tools, gamification, short e-learning pieces, and simulations. Further, the effective group reported using virtual instructor-led training (VILT) 14% more often than the ineffective group.

Figure 12
Figure 13 depicts the usage of virtual tools (i.e., virtual environment, webinar or VILT) to support leadership training initiatives. As can be seen, the effective group reported using these types of tools 32% more often than the ineffective group.

Figure 13

<table>
<thead>
<tr>
<th></th>
<th>Effective Group, N=118</th>
<th>Ineffective Group, N=67</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage Percentage</td>
<td>83%</td>
<td>51%</td>
</tr>
</tbody>
</table>
Planned Use of Tools for Leadership Training

Learning leaders were also asked to indicate whether their organization planned to use various tools and technology within the next year to support leadership training. Respondents reported that mobile learning was the most commonly planned for use, followed by gamification (Figure 14). Notably, tools and technology that allow for learner interaction (e.g., social networking tools/software, virtual groups, and community forums or panels) were also frequently planned for use.

Figure 14

<table>
<thead>
<tr>
<th>Tool</th>
<th>Percent of Respondents, N = 138</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile learning</td>
<td>53%</td>
</tr>
<tr>
<td>Gamification</td>
<td>41%</td>
</tr>
<tr>
<td>Social networking tools/software</td>
<td>39%</td>
</tr>
<tr>
<td>Virtual work groups</td>
<td>39%</td>
</tr>
<tr>
<td>Wiki/e-library</td>
<td>38%</td>
</tr>
<tr>
<td>Community forums or panels</td>
<td>37%</td>
</tr>
<tr>
<td>Blogs and microblogs</td>
<td>36%</td>
</tr>
<tr>
<td>Short e-learning pieces</td>
<td>33%</td>
</tr>
<tr>
<td>Virtual instructor-led training (VILT)</td>
<td>31%</td>
</tr>
<tr>
<td>Knowledge repository</td>
<td>30%</td>
</tr>
<tr>
<td>Simulations</td>
<td>30%</td>
</tr>
<tr>
<td>Webinars</td>
<td>25%</td>
</tr>
<tr>
<td>Video</td>
<td>20%</td>
</tr>
<tr>
<td>Case studies</td>
<td>18%</td>
</tr>
<tr>
<td>Emails</td>
<td>7%</td>
</tr>
</tbody>
</table>

Percent of Respondents, N = 138
Usefulness of Tools for Leadership Training

In order to further investigate the use of tools and technology to support leadership training initiatives, learning leaders were asked to rate their usefulness for such purposes. Figure 15 presents the frequency with which respondents rated each as useful or very useful. Case studies, simulations, videos, and short e-learning pieces were rated as most useful for supporting leadership training initiatives.

Figure 15

<table>
<thead>
<tr>
<th>Tool</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case studies</td>
<td>79%</td>
</tr>
<tr>
<td>Simulations</td>
<td>75%</td>
</tr>
<tr>
<td>Video</td>
<td>74%</td>
</tr>
<tr>
<td>Short e-learning pieces</td>
<td>65%</td>
</tr>
<tr>
<td>Webinars</td>
<td>57%</td>
</tr>
<tr>
<td>Knowledge repository</td>
<td>57%</td>
</tr>
<tr>
<td>Virtual instructor-led training</td>
<td>54%</td>
</tr>
<tr>
<td>Social networking tools/software</td>
<td>52%</td>
</tr>
<tr>
<td>Virtual environments</td>
<td>50%</td>
</tr>
<tr>
<td>Virtual work groups</td>
<td>43%</td>
</tr>
<tr>
<td>Community forums or panels</td>
<td>43%</td>
</tr>
<tr>
<td>Mobile learning</td>
<td>42%</td>
</tr>
<tr>
<td>Emails</td>
<td>41%</td>
</tr>
<tr>
<td>Gamification</td>
<td>36%</td>
</tr>
<tr>
<td>Wiki/e-library</td>
<td>31%</td>
</tr>
<tr>
<td>Blogs and microblogs</td>
<td>22%</td>
</tr>
</tbody>
</table>

Percent of Respondents, N ranges from 185 to 196
Interestingly, while mobile learning, gamification, wiki/e-libraries, and blogs and microblogs were rated least useful, the percent of respondents rating each as useful was much greater for respondents whose organization used these tools/technologies (Figure 16). With respect to these four tools, learning leaders were two to three times more likely to rate the tool as useful or very useful if their organization currently used the tool to support leadership development.

Figure 16

<table>
<thead>
<tr>
<th>Tool</th>
<th>Use, N ranges from 27 to 41</th>
<th>Do not Use, N ranges from 147 to 160</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Learning</td>
<td>65.8%</td>
<td>29%</td>
</tr>
<tr>
<td>Gamification</td>
<td>59%</td>
<td>28%</td>
</tr>
<tr>
<td>Wiki/e-library</td>
<td>68%</td>
<td>20%</td>
</tr>
<tr>
<td>Blogs and Microblogs</td>
<td>39%</td>
<td>13%</td>
</tr>
</tbody>
</table>
Incorporating Virtual Environments into Leadership Training

Factors to Consider when Introducing Virtual Environments in Leadership Training

Learning leaders were also asked to rate the importance of various factors when considering virtual environments for leadership development. Figure 17 charts the frequency with which respondents rated each factor as important or very important. Increasing effectiveness, improving engagement, and involving more company leaders/SMEs were rated as the most important factors to consider. However, for respondents from large organizations, improving consistency was the third most important factor, with approximately 84% rating it as important or very important.

Figure 17

- Increasing effectiveness: 91%
- Improving engagement: 85%
- Involving more company leaders/SMEs: 83%
- Reducing travel costs and time: 80%
- Improving consistency: 80%
- Tracking content usage and relevance: 78%
- Measuring attentiveness and participation: 75%
- Increasing the number of people trained: 70%
- Reducing time in physical classrooms: 67%
- Incorporating innovative technologies: 60%
- Accessing via mobile devices: 47%
- Incorporating gamification: 39%

Percent of Respondents, N ranges from 178 to 182
Best Practices

Finally, learning leaders were asked to provide a best practice for incorporating virtual environments in leadership training. They shared 78 best practices with the following common themes, in order of most to least often mentioned:

- Incorporate various design elements/features, including:
  - Virtual technologies that allow for participant interaction.
  - Brief virtual sessions/training.
  - Involving senior leadership in training instruction/delivery.
- Blend with more traditional methodologies.
- Gather senior leadership support.
- Ensure content is relevant and engaging.
- Clearly communicate expectations and benefits of training.
Conclusions

Leadership training initiatives are critical for organizational improvement and sustained performance; however, these programs are costly to develop, deliver, and evaluate. Maximizing the impact of such initiatives is key for maintaining organizational effectiveness. Several recommendations for maximizing impact emerged from this research. In particular, this research report provides evidence for the utility of incorporating virtual environments into these initiatives, as organizations that utilize virtual environments are considered more effective in providing leadership training.

Further, the results of this research point to several important trends and best practices for both leadership training and the use of virtual environments in blended learning solutions. It is clear that training duration plays a major role in effectiveness. While the majority of respondents indicated that their organization’s leadership training initiatives are relatively short (one week or less), organizations with longer lasting initiatives were more likely to be rated as effective. Moreover, effective organizations were more likely to utilize post-training design features. This finding is particularly important, given the frequently cited challenge of sustaining the impact of leadership training. Thus, timing must be considered in the design, development, and delivery of such initiatives in order to maximize their effectiveness.

Maintaining consistency across geographic regions and departments was reported as the third most commonly faced challenge for large organizations. Similarly, when asked about important considerations for incorporating virtual environments into leadership training initiatives, learning leaders from large organizations indicated that improving consistency was among the top three most important factors to consider. Moreover, virtual environments were rated as most effective for delivering training types that require a great deal of consistency (e.g., product training, IT training). These results suggest that virtual environments have the potential to address a major organizational challenge by allowing for greater consistency in training delivery.

Further, this research points to a number of best practices for incorporating virtual environments in leadership training initiatives. Organizations that are considered effective providers of such initiatives are more likely to include experiential learning, pre-work/e-learning, team assessments, post-training coaching, and post-course assessments in those initiatives. These organizations are more likely to utilize short e-learning pieces, simulations, and virtual tools and technology (e.g., virtual instructor led training, webinars, and virtual environments). Learning leaders also suggest
that involving senior leadership, gathering their support, and clearly communicating both expectations and benefits are best practices to follow.

Finally, it is clear that virtual tools and technologies are increasingly important for leadership training. Respondents overwhelmingly indicated that virtual tools and technologies are currently being used and/or are planned for use in support of leadership training initiatives. While videos, webinars, short e-learning pieces, and simulations are the most currently used virtual tools and technologies, mobile learning, gamification, social networking tools, virtual groups, and wiki/e-libraries are the most commonly planned for future use.
Demographics

Company Sizes

Approximately 53% of respondents represent companies with 1,000 employees or more.

Figure 18
Industries Represented

Approximately 58% of respondents are from the top five industries, including Business Services/Consulting, Health Care, Banking/Finance, and Technology.

Figure 19

- Business Services/Consulting: 12%
- Health care: 12%
- Training and Development: 9%
- Banking/Finance: 9%
- Technology (Computers, Software, ISP, etc.): 7%
- Government (State/Local): 5%
- Insurance: 5%
- Education (K-graduate): 4%
- Government (Federal, including Military): 4%
- Non-profit: 4%
- Manufacturing-Durable Manufacturing: 4%
- Retail: 3%
- Manufacturing-Non-Durable: 3%
- Utilities: 2%
- Oil and Gas: 2%
- Other Industries: 19%

Percent of Respondents, N=198
Departments

The majority of respondents hold positions in Human Resources.

Percent of Respondents, N=198
Job Roles

Approximately 69% of respondents hold leadership titles (i.e., management or executive-level roles).

Percent of Respondents, N=198

- Executive: 36%
- Manager: 33%
- Consultant/Associate: 13%
- Instructional Designer: 7%
- Instructor: 2%
- Trainer: 6%
- Specialist/Analyst: 3%
About This Research

About ON24
ON24, the virtual communications platform for the global enterprise, provides interactive, impactful cloud-based solutions that drive outstanding results. ON24 offers a broad and innovative product portfolio, including webcasting, virtual events and virtual environments, accessible from any device and supported by robust reporting and analytics. Applications for the ON24 platform include user conferences, company town hall meetings and virtual talent development.

More than 800 organizations, including IBM, Merck, Unilever, Deloitte, Amazon and SAP, rely on ON24. The company is headquartered in San Francisco, with offices throughout the world. For more information, visit: http://www.ON24.com.

About Training Industry
Our focus is on helping dedicated business and training professionals get the information, insight and tools needed to more effectively manage the business of learning. Our website, TrainingIndustry.com, spotlights the latest news, articles, case studies and best practices within the training industry.

For more information, go to www.trainingindustry.com, call 866.298.4203 or connect with us on Twitter and LinkedIn.

About This Research
Training Industry research captures the collective wisdom of learning professionals, revealing fresh data on trends and practices in the evolving training market. Copyright © 2013 by ON24 and Training Industry, Inc. All rights reserved. No materials from this study can be duplicated, copied, re-published or re-used without written permission from ON24 or Training Industry, Inc. The information and insights contained in this report reflect the research and observations of ON24 and Training Industry, Inc. analysts.